

## CHAPTER THREE

THE FRAMEWORK OF THE CONTEXT THEORY  
IN ARABIC PHILOSOPHY

It is apparent from the inchoate discussions of the context theory within school of Alexandria that the adoption of a logical classification of *Rhetoric* and *Poetics* necessitates a serious reappraisal of the principles and aims of the logical arts in general. Within the Alexandrian tradition, a broad sets of issues seem to emerge as central to this process of reevaluation: one set involves the question of the relationship within logic between language and argumentation; the other concerns the relationship between logic and syllogistic, and the role of truth-values and modality in determining the status of the various logical arts. Both sets of issues remain important in the Arabic tradition's appropriation of the context theory. But whereas the Greek commentary tradition seemed to offer only a very general, and sometimes dubious, treatment of these themes, the Islamic tradition provides a fully developed account of what sort of discipline logic must be if it is to encompass the arts of rhetoric and poetics. A key element in the ability of the Islamic philosophers to accomplish this task is their use of the two epistemological concepts of *taṣawwur* and *taṣdīq* (conception and assent) to explain the structure and aims of all the logical arts. With these two concepts, the Islamic tradition was able to formulate a unified conception of logic within which the context theory could be incorporated.

In the present chapter, we will consider in a general way the Islamic philosophers' discussion of the above issues insofar as they form the framework into which the logical construal of rhetoric and poetics must be assimilated. First among the themes that we will examine is that of the relationship between logical argumentation and its linguistic embodiment, and the implications of that relationship for the communicative potential that unites the social and rational character of human discourse.

## A. LOGIC, LANGUAGE, AND COMMUNICATION

1. *Apophantic and Non-Apophantic Discourse*

In the previous chapter, we discussed briefly a possible interpretation of Ammonius's claim that poetics and rhetoric together form a distinctly syllogistic species of logic.<sup>1</sup> This interpretation, based on Ammonius's commentary on chapter four of the *De interpretatione*, involved a bi-partitioning of logic according to whether a given logical art is directed primarily toward communicating the contents of a process of reasoning to another individual

or whether instead it is primarily concerned with the relationship that obtains between language and the reality that it purports to interpret.

The remarks of Aristotle that are at the root of this distinction are brief, even parenthetical. Having given his definition of the meaning of "sentence" or "statement" (λόγος) as it is used in logic, Aristotle, in chapter four of the *De interpretatione*, goes on to specify what kinds of statements (λόγοι) are apophantic or assertoric, and hence included within the scope of the *De interpretatione*. The distinguishing characteristic of apophantic statements for Aristotle is that they are "those in which there is truth and falsity." Non-apophantic discourse, which can usually be identified by the use of non-indicative grammatical moods (Aristotle's example is prayer), are placed outside the scope of the *De interpretatione*, and specifically designated as part of the realm of the poetical and rhetorical arts.<sup>2</sup>

Ammonius, as we noted earlier, claims to be following the lead of Theophrastus when he develops two distinct but related doctrines on the basis of Aristotle's brief remarks. In the text alluded to in the previous chapter, Ammonius suggests that non-apophantic discourse is not concerned with truth and falsity *per se*, because it fulfills the communicative functions of language primarily, and the cognitive functions only secondarily. The converse emphasis, however, obtains in the case of apophantic discourse. Hence, the non-apophantic functions of language are more properly dealt with in rhetoric and the poetics, because these two logical arts use language primarily to move and influence an audience, and not simply to convey knowledge and information.<sup>3</sup>

In the same passage, and in the Prooemium to his *De interpretatione* commentary, Ammonius suggests that the dichotomy between apophantic and non-apophantic speech has roots that reach far deeper than the simple distinction between communicative and intellective functions within language. Ammonius observes in his Prooemium that there is a fundamental distinction in human nature itself between the intellective and the animal or appetitive powers.<sup>4</sup> Apophantic discourse alone is primarily derived from a person's cognitive or intellective powers, and it is for this reason that truth and falsity are properly applied to it. The various forms of non-apophantic discourse, on the other hand, proceed from the soul's appetitive powers, for they use speech in order to seek and acquire the objects desired by the appetitive faculties.<sup>5</sup>

<sup>2</sup> *De interpretatione* 4.17a2-7. The new Oxford translation renders ἀποφαντική as "statement-making," whereas I have preferred to retain the Greek term, or to use "assertoric" as a translation.

<sup>3</sup> Ammonius, *In De interpretatione*, 65.31-66.10, Verbeke, 126.17-30.

<sup>4</sup> Prooemium, *In De interpretatione*, 5.1-17, Verbeke, 7.15-8.32. The general concern of Ammonius in this passage is to explicate the meaning of "interpretation" as it is used in the title of Aristotle's work.

<sup>5</sup> The various ways in which the soul is able to extend itself appetitively towards others are the basis for a further fourfold division of non-apophantic speech. See *In De interpretatione*, 5.6-14, Verbeke, 8.21-29: "The four kinds of speech which are not apophantic derive from the

<sup>1</sup> See above, 33-34.

In his exposition of *De interpretatione* chapter four, Ammonius makes plicit the link between the psychological foundations of non-apophantic speech in the soul's appetitive powers and the communicative function tha assigned to non-apophantic statements within the scope of logic. The task communicating to the audience by its very nature entails an appeal to the audience's appetitive powers. For here the speaker's purpose is not merely disclose the truth and refute errors; it is also his responsibility "to astor the audience, and make it more receptive to persuasion (τὸν ἀκροατὴν ἐκ πλῆξαι καὶ πρὸς τὴν πειθῶ χειρωθέντα ἔχειν)" about what he has closed.<sup>6</sup> This, then, is what requires the orator and the poet to rely upon w of speaking which are more ornate than simple apophantic discourse. this ornateness will contribute to the task of affecting the audience, altho it may be superfluous, in Ammonius's view, for the task of conveying truth.

In the Islamic philosophers' commentaries on *De interpretatione*, cha four, several of these same themes are also evident. In the *Shifā'*, Avicenna emphasizes the point that apophantic speech (*al-qawl al-jāzim*) is the form of discourse to which truth and falsehood properly apply, and he dir us, like Aristotle, to the arts of rhetoric and poetics for the rules govern the other modes of speech.<sup>7</sup> Averroes' commentary places similar emph on the dominion of apophantic speech over the spheres to which truth falsehood are proper.<sup>8</sup> It is in the commentaries of al-Fārābī, however, the distinction briefly indicated by Aristotle, and developed in detail by Ammonius, receives the most attention. Fārābī too concurs with the basic that truth-values do not apply to non-apophantic speech, but he sugg rather cryptically that there is a sense in which these modes of discourse be called true or false, if only accidentally.<sup>9</sup> Unfortunately Fārābī does

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appetitive powers (ἐπὶ τῶν ὀρεκτικῶν δυνάμεων) not by the soul acting on itself, but reaching out to someone else whom it considers able to help it, in order to obtain what it s [This occurs] by its seeking from someone either words, in inquisitive or interrogative sp or some deed (πράγμα). And if a deed, it either seeks to obtain [the attention] of the very son to whom the speech [is addressed], which is the vocative, or some action on his part. this [is sought] either from a superior, as in the optative, or from an inferior, as in the pro imperative."

<sup>6</sup> Ibid., 66.6–7, Verbeke, 126.26–27.

<sup>7</sup> *Al-Shifā'*, vol. 1, pt. 3, *Al-'Ibārāh* (Interpretation), ed. M. El-Khodeiri, rev. I. Mac (Cairo: Dar el-Katib al-'Arabi, 1970), 32.3–5.

<sup>8</sup> *Talkhīṣ kūtāb al-'ibārāh* (Middle commentary on the *De interpretatione*), ed. N Kassem, rev. C. E. Butterworth and A. Haridi (Cairo: General Egyptian Book Organiz 1981), §§16–17, 66.15–67.1. English translation by C. E. Butterworth, *Averroes' Middle mentaries on Aristotle's "Categories" and "De Interpretatione"* (Princeton: Princeton Univ Press, 1983), 132–33.

<sup>9</sup> Al-Fārābī, *Kūtāb Bārī armīniyās ayy al-'ibārāh* (*Peri Hermeneias, i.e. Interpretation* M. Küyl [Türker], "Fārābī'nin Peri hermeneias muhtasari," *Arastırma* 4 (1966): 47.14 The same treatise is edited by Muhammad Salīm Sālim, *Kūtāb fī al-manṭiq: al-'ibārāh* ([C Dār al-Kutub, 1976), 19.2–3; still more recent is the edition of Al-'Ajam in vol. 1 of *Al-n 'inda al-Fārābī*, 140.17–18. (Hereafter cited as *'Ibārāh*: refs. to the 1966 ed. prefaced by refs. to 1976 ed. by "S"; refs. to the 1986 ed. by "A"). English translation by F. W. Zir

philosopher who explicitly takes up in this context Ammonius's assignment of a communicative function to the four non-apophantic modes of speech. Fārābī notes that, in Arabic, the differences among the non-apophantic modes are distinguished solely on the basis of the different relations that obtain between the speaker and the addressee: a superior to an inferior (imperative); an inferior to a superior (deprecatory); and an equal to an equal (interrogative). Only the vocative, which requires the addition of a phrase or particle, is morphologically distinct from the rest.<sup>15</sup>

There is an important, but easily overlooked, principle underlying Fārābī's awareness that the relation between the morphological distinctness of grammar, and the "illocutionary" acts of logic, is a merely accidental one. We have seen already that the ability to "translate" morphologically distinct forms into the indicative led some grammarians and logicians to the fallacy of judging non-apophantic discourse as essentially true or false. But such a fallacy would seem to be one to which it is all the more easy to succumb in the case of rhetoric and poetics, where non-apophantic statements are often morphologically indistinguishable from those assertions that do make truth-claims. A poetic metaphor, for example, will have the form "S is P," though it does not seem to be asserted as a literal claim that a given predicate actually inheres in the subject.

The increased potential for such confusion in the realms of rhetoric and poetics is attributable in part to the limitations of the *De interpretatione* of Aristotle, the sage that originally provided the impetus for the discussions of Ammonius and Fārābī. In relegating the study of non-apophantic discourse to rhetoric and poetics, Aristotle provides us with a single example of a non-apophantic utterance, prayer or entreaty. Understandably, this example has been chosen because its non-indicative grammatical form (in Greek) makes it clearly recognizable as a non-apophantic utterance. But as a result of this, the Aristotelian tradition sometimes seems to assume that the apophantic status of the logician coincides with the indicative statement of the grammarian.

<sup>15</sup> Fārābī, *ʿIbārāh*, T45.14–15, S17.6–8, A139.13–14; Zimmermann trans., 226: "Imperative, request, and entreaty all have the same shape in Arabic. They only differ as regards the person speaking and spoken to." Cf. *Sharḥ al-Fārābī li-kitāb Aristūṭālīs fī al-ʿibārāh* (Alfarabi's commentary on Aristotle's *Peri hermeneias*), ed. W. Kutsch and S. Marrow, Recherches de l'Institut de Lettres Orientales de Beyrouth, no. 12 (Beirut: Imprimerie Catholique, 1967), 51.11–13 (hereafter cited as *Sharḥ al-ʿibārāh*); English translation by F. W. Zimmermann, *Farabi's Commentary and Short Treatise*: "... [W]e find that imperative, request, and entreaty are shaped alike in the languages we have obtained information about. As regards their status, they come under the same division. They differ only with regard to the addressee" (43–44).

<sup>16</sup> The term "illocutionary act" was coined by J. L. Austin, in *How To Do Things With Words*, ed. J. O. Urmson and Marina Sbisa, 2d ed. (1962; reprint Cambridge: Harvard University Press, 1975), 98–132. Austin's theory was further developed by John R. Searle, *Speech Acts: An Essay in the Philosophy of Language* (Cambridge: Cambridge University Press, 1969), 2–3. The terms "illocutionary act" and "speech act" refer to the performative aspects of language use, i.e. what the speaker intends to accomplish by means of his utterance, as distinguished from the utterance's reference and predication. Examples of illocutionary acts are asking, questioning, promising, warning, demanding, asserting, and so on.

reflecting the dual character of language as both a communicative tool and vehicle for the acquisition of knowledge. This particular distinction has obvious affinities with the distinction between apophantic and non-apophantic speech. But whereas that distinction was rooted in the remarks of *De interpretatione*, chapter four, the theme that now concerns us seems to be inspired instead by the consideration, in the opening lines of the *De interpretatione*, the relation between the written word, the spoken word, the impressions of the soul, and the extramental objects corresponding to these impressions. Aristotle observes that both the written and the spoken word act as signs of objects and impressions, and that while these signs vary from one linguistic group to the next, the objects and impressions themselves are universally the same for all humans. It is this semiotic conception of language that provides the basis for the Arabic philosophers' awareness that logic must study the conditions, not only of rational argumentation, but also of its linguistic embodiment. This perspective is aptly expressed by Fārābī in his *Iḥṣāʾ al-ʿulūm* where the subjects (*mawḍūʿāt*) of logic are described as "the intelligibles (*maʿqūlāt*) insofar as they are signified by expressions (*al-alfāz*), and expressions insofar as they signify the intelligibles."<sup>19</sup>

Within this dual ordination of logic, however, the rational or intelligible aspects are accorded a clear priority over the purely linguistic. Nonetheless Fārābī reaffirms throughout this and other works that the connection between expressions and intelligibles is essential to logic, and reflected in both the Greek and the Arabic words for "logic" (λόγος/*nuṭq*): "For both of these, that is, the intelligibles and the words (*al-aqāwīl*) by which they are interpreted, the ancients called 'speech' (*al-nuṭq*) and 'word' (*al-qawf*). For they called the intelligibles 'the word' or 'the internal speech established in the soul'; whereas they called that by which it is interpreted 'the word' or 'speech emitted vocally' (*wa-al-nuṭq al-khārīj bi-al-ṣawt*)."<sup>20</sup>

The dual ordination of logic to both the external and the internal worlds figures prominently in Fārābī's discussion in the *Iḥṣāʾ* of the purpose of logic. According to Fārābī, the primary utility of logic is in the verification or validation of the truth (*taṣḥīḥ*) and the prevention of error,<sup>21</sup> through the application of a determinate body of canons or rules.<sup>22</sup> This process of logical verification can either be directed towards a personal and intellectual end, or

<sup>18</sup> *De interpretatione* 1.16a3–8.

<sup>19</sup> *Iḥṣāʾ al-ʿulūm*, 74.10–12, Palencia, 133.23–25.

<sup>20</sup> *Iḥṣāʾ al-ʿulūm*, 75.7–11, Palencia, 134.12–16.

<sup>21</sup> The basic meaning of *taṣḥīḥ* is "to make sound/healthy." It can be applied both to the process of confirming and validating true beliefs, and to the correction and rectification of beliefs that are found to be unsound.

<sup>22</sup> *Iḥṣāʾ al-ʿulūm*, 67.5–9, Palencia, 128.7–14: "For the art of logic provides in general the canons whose role it is to rectify (*tuqawwimu*) the intellect (*al-ʿaql*), and to show humans the way to the path of correctness and to the truth, in everything among the intelligibles about which it is possible to err. [Logic also gives] the canons which preserve and protect the intellect from error, lapses, and mistakes concerning the intelligibles; and [it gives] too the canons by which it may put things concerning the intelligibles to the test, [things] of which it is not certain whether it may be in error."

towards a social and communicative one. For the logician does not simply seek to validate beliefs for himself. He also examines the methods of measuring and verifying the views of others, and the methods of responding to those who seek to validate or correct his own tenets.<sup>23</sup>

It would seem that the distinction between personal and communicative aims within logic is the fundamental one in Fārābī's view, and ultimately provides the grounds for recognizing the dual character of the subject-matter of logic. For Fārābī suggests that the logician's concern with the external word, as well as the internal, is itself necessitated by the fact that the intellect towards which logical validation is directed need not be one's own. This emerges clearly from the explanation that Fārābī provides for his claim that the subject-matter of logic cannot be confined to either intelligibles or expressions alone, but must include as well a recognition of the interplay between the two:<sup>24</sup>

And this is because we only verify belief (*al-raʾy*) for ourselves by thinking, reflecting, and establishing in our souls facts (*umūran*) and intelligibles whose role it is to verify this belief. And we only verify [a belief] for another by communicating (*bi-an nukhāṭiba-hu*) to him with words (*bi-aqāwīlin*) by which we make him understand the facts and the intelligibles whose role it is to verify this belief.<sup>25</sup>

<sup>23</sup> Ibid., 69.2–4, Palencia, 129.22–25: "And it is clear that this purpose [of logic] is of great utility, in everything which we seek to verify for ourselves (*taṣḥīḥ ʿinda anfasinā*), and in what we seek to verify for others, and in what others seek to verify for us."

That Fārābī considers all three of these relations between the act of verification and the recipient of that act to be important is evidenced by the fact that he devotes a separate discussion to the question of how the canons of logic operate in each of these three situations, i.e. when the canons are for ourselves, when they are for others, and when they are applied to our beliefs by someone else (*Iḥṣāʾ al-ʿulūm*, 69.5–73.3, Palencia, 129.25–132.21). Cf. also *Falsafah Aristūṭālīs*, 78.15–17, Mahdi trans., 87: "[Aristotle] gave an account of all the rules that can be employed by the man who investigates, . . . some for when he is investigating by himself and some for when he is investigating with others."

<sup>24</sup> Cf. the *Kiṭāb al-jadal*, 63.3–5, where Fārābī emphasizes that the term "premise" (*al-muqaddimah*) can be applied to any categorical proposition which is to be used in a syllogistic context, "which a person employs concerning what is within himself (*fi-mā bayna-hu wa-bayna nafsi-hi*), or which he employs in addressing someone else (*fi mukhāṭabati ghayri-hi*)."

<sup>25</sup> *Iḥṣāʾ al-ʿulūm*, 74.12–15, Palencia, 133.25–29. It may be necessary to explain the translation of *al-raʾy* as "belief" rather than the more usual "opinion." I have avoided using "opinion" because in both the Platonic and Aristotelian traditions "opinion" suggests a translation of *δόξα*, and implies a conscious opposition to *ἐπιστήμη*, i.e. certain knowledge. But this aspect of *δόξα* is almost always rendered by the Arabic *ẓann*, (usually translated as "supposition"), whereas *raʾy* generally connotes any thought or belief, whether certain or not, viewed from the perspective of the knower's adherence to it, rather than from that of its objective strength or correctness. For explicit statements to this effect, see Fārābī, *Sharāʾiʿ al-yaqīn* (Conditions of certitude), ed. M. Fakhry in *Kiṭāb al-burhān wa kiṭāb sharāʾiʿ al-yaqīn suwīs des gloses d'Ibn Bāja sur le Burhān*, vol. 4 of *Al-Mantiq ʿinda al-Fārābī* (Beirut: Dar el-Mashreq, 1987), §1, 98.5–7: "We said 'that one be convinced of the thing that it is thus or not thus.' This is the genus of certitude. And it makes no difference whether we call it conviction (*al-ʿitiqād*) or consensus (*al-ijmāʿ*) that this is thus or not thus. And this is belief (*wa-hadhā al-raʾy*)."<sup>26</sup> Cf. *Kiṭāb al-khaṭābah* (Book of rhetoric), ed. Jacques Langhade in *Deux ouvrages inédits sur la Rhétorique* (sic), ed. J. Langhade and Mario Grignaschi, *Recherches de l'Institut de Lettres Orientales de Beyrouth*, vol. 48 (Beirut: Dar el-Machreq, 1971), 33.7–35.2: "And opinion (*al-ẓann*) and certitude (*al-yaqīn*) have in common the fact that they are belief (*raʾyun*). And belief is to be con-



Although the distinction between the inner and outer word suggests the communicative aspects of language ought to be considered equally as important for the logician as are the intellectual ones, the Islamic philosophers including Fārābī, generally accord priority to those arts in which the meaning as understood has precedence over its linguistic expression.

This point is very clearly exemplified in Avicenna's discussion of the definition of the syllogism in the *Qiyās*. Avicenna begins here by identifying the genus of the syllogism as that of discourse or statements (*al-qawf*). Like Fārābī before him, Avicenna notes that discourse, and thus syllogistic, applies both to the mental constructs or reasonings (*afkār*) which lead the soul to give its assent to something else, and to the composite of spoken propositions by which another proposition is entailed. However, Avicenna claims that speech as uttered and audited is not an essential component of syllogistic. The reason for this is that expressions, taken simply in themselves, do not entail anything, since the logical connections upon which the syllogism is based are not directly dependent upon linguistic constructions. It is only because language signifies intelligible meanings, which can be combined with one another to lead the mind to hitherto unknown intelligibles, that the syllogism can be identified as a linguistic construct as well as a rational one.<sup>26</sup>

While Avicenna does admit that both the vocal and the intelligible words together constitute the genus of the syllogism, the priority accorded to intelligible aspects of the syllogism is unmistakable. Avicenna adds, moreover, that this order of priority is preserved fully in demonstrative syllogisms alone. Only demonstrative syllogisms can be perfected and completed simply through their relation to intelligible meanings. In all the other arts, communication is an essential, and often overriding, concern. The result is that for them, the primary cognitive goals of the syllogism become subordinated to secondary aims:

However, the syllogism which is understood (*al-qiyās al-ma'qūl*) may suffice for by itself in attaining the end of the syllogism, if what is sought is demonstrative.

vinced of something that it is thus or not thus. And it is like the genus of the two, whereas they are like [its] species." Cf. Georges Vajda, "Autour de la théorie de connaissance chez Saad," *Revue des Études Juives* 126 (1967): 378 n. 1.

Avicenna also uses *ra'y* as a generic term to cover both *'ilm* and *ẓann* in the *Burhān al-Shifā'*, 256.4-5: "Among that which is known, there is knowledge (*'ilm*) of the thing (opinion (*ẓann*)) of it. The difference between them is by way of security and insecurity [respectively], but both of them are included under belief (*wa-anna-humā dākhilān tahta ra'y*)." The latter passage is noted by Josef Van Ess, *Die Erkenntnislehre des 'Aḥmad al-ʿAḍadī* (Wiesbaden: Franz Steiner Verlag, 1966), 72; but Van Ess suggests that *ra'y* is rendering *ḍalā* here. This is unlikely, however, for in the corresponding Aristotelian text (*Posterior Analytics* 1.33) *ḍalā* is being contrasted throughout with *ἐπιστήμη* (= *'ilm*), and thus is equivalent to *ẓann* in Avicenna's exposition. Charles Butterworth also recognizes this distinction between *ra'y* and *ẓann* in his edition: translation of Averroes' *Jawāmi' al-jadal*, 104 n. 1, though he continues to render *ra'y* as 'opinion.'

<sup>26</sup> Avicenna, *Qiyās*, 54.6-55.1. Fārābī too notes that the term "syllogism" can be applied both to the external vocal utterance and to the mental construct, *ḥṣā' al-'ulūm*, 75.12-14, *lencia*, 134.19.

for dialectical, rhetorical, and sophistical syllogisms, as well as poetics, the syllogism as heard cannot be dispensed with in bestowing the end of each of them.<sup>27</sup>

This notion of the relative independence of demonstration from the exigencies of language is a reflection of the more general conviction that logic is principally aimed at a cognitive end, whose pinnacle is identified as the attainment of noetic certitude. Since language has been conceived primarily as a sign and conveyor of such intellectual goals, its logical importance becomes secondary. So the preoccupation of the non-demonstrative arts with language naturally becomes an important indicator of their secondary logical status. In some extreme cases, the linguistic dependency of these arts seems to preclude their inclusion in the scope of philosophy. Such a tendency is evident, for example, in Fārābī's occasional penchant for identifying demonstrative discourse with philosophy itself.<sup>28</sup>

Despite the clear precedence given to demonstration because of its relative independence from the linguistic and communicative encumbrances of logic, there are indications of a counterbalancing awareness in Islamic philosophy that demonstration alone cannot fulfill the aims of logic. The most important indication of this moderating view is found in Fārābī's *Tahṣīl al-sa'ādah* (Attainment of happiness). In this work, Fārābī tells us that the logician who confines himself to the purely theoretical and personal goals of his art can never be a consummate philosopher:

When the theoretical sciences are isolated and their possessor does not have the faculty for exploiting them for the benefit of others, they are defective philosophy. To be a truly perfect philosopher one has to possess both the theoretical sciences and the faculty for exploiting them for the benefit of all others according to their capacity.<sup>29</sup>

<sup>27</sup> *Qiyās*, 55.6-9. With a slightly different emphasis, Fārābī too notes the special link between communication and the non-demonstrative arts. See *Al-Tawḥīd* (Introduction [to logic]), ed. and trans. D. M. Dunlop in "Al-Fārābī's Introductory *Risālah* on Logic," *Islamic Quarterly* 3 (1956-57): 226.6-8; more recently edited by Rafiq al-Ajam in vol. 1 of *Al-mantiq 'inda al-Fārābī*, 56.15-57.2: "The syllogism is employed either in discoursing with another or in a person's bringing out something in his own mind. It is characteristic of philosophy to employ the syllogism in both matters, while the rest of the five each employs many syllogisms in discoursing with another. Philosophical discourse is called demonstrative" (Dunlop trans., 231, slightly modified).

<sup>28</sup> E.g. *Al-Tawḥīd*, 'Ajam ed., 56.15-57.2, Dunlop ed., 226.6-8, trans., 231 (quoted in n. 27 above). Cf. *Kūb al-jadal*, 27.12, where the philosophical sciences (*al-'ulūm al-falsafiyah*) are equated with the certain (*al-yaqīniyah*, i.e. demonstrative) sciences.

The theme of communication as it relates to the non-demonstrative arts is discussed by Galston, in "Al-Fārābī et la logique aristotélicienne," 206-21. Galston's interpretation of the implications of Fārābī's views on the relationship between demonstration, philosophy, and the other logical arts in "Al-Fārābī on Aristotle's Theory of Demonstration," in *Islamic Philosophy and Mysticism*, ed. Parviz Morewedge (Delmar, N. Y.: Caravan, 1981), 23-34, is somewhat different from our own.

<sup>29</sup> *Tahṣīl al-sa'ādah*, 89.9-12, Mahdi trans., 43. That Fārābī has the use of rhetoric and poetics in mind is evidenced by his reference, a few pages later, to the use of persuasive and imaginative methods: "Moreover, [the philosopher] cannot bring [the voluntary intelligibles] about in all others according to their capacities except by a faculty that enables him to excel in persuasion and in representing things through images" (92.9-10, Mahdi trans., 46).

Despite the clear acknowledgement that this passage makes of the philosopher's duty to communicate his knowledge, the subordination of the communicative part of logic nonetheless prevails. For Fārābī declares explicitly, in the same text, that however indispensable the linguistic and communicative arts may be for the philosopher's overall perfection, their importance pertains exclusively to his social and political tasks. The philosopher, as philosopher, does not need the communicative arts of rhetoric and poetics to perfect his own knowledge; nor do these arts enrich in any way his personal philosophical experience. Such a view is stated rather bluntly in Fārābī's discussion of the relation between philosophy and religion:

Now these things are *philosophy* when they are in the soul of the legislator. They are *religion* when they are in the souls of the multitude. For when the legislator knows these things, they are evident to him by sure insight, whereas what is established in the souls of the multitude is through an image and a persuasive argument. Although it is the legislator who also represents these things through images, neither the images nor the persuasive arguments are intended for himself. As far as he is concerned, they are certain. He is the one who invents the images and the persuasive arguments, but not for the sake of establishing these things in his own soul as a religion for himself. No, the images and persuasive arguments are intended for others, whereas, so far as he is concerned, these things are certain.<sup>30</sup>

It is obvious that a certain ambivalence is present within the Arabic philosophers' general discussion of the communicative aspects of logic, especially when they relate to the arts of rhetoric and poetics. Perhaps paradoxically, the universal acknowledgement of the logician's need to concern himself with communication is an important factor in promoting the full participation in the arts of rhetoric and poetics in the realm of logic; yet at the same time, the communicative functions of rhetoric and poetics ensure their subordination to what remains the primary purpose of logic, the guidance of the philosopher in his quest for certitude.<sup>31</sup>

<sup>30</sup> *Taḥṣīl al-sa'ādah*, 94.7–15, Mahdi trans., 47. Cf. Averroes, *Epitome in libros logicae* (A. Totelli, Abramo de Balmes interprete, vol. 12 of *Opera omnia* (Venice, 1704), 62ab: "[N]on ciemus mentionem de his sermonibus, nisi de illis, quorum consuetudo est, ut veniant in usum demonstrationis. Et hi sunt necessario duarum specierum, vel communes arti demonstrationi et caeteris quinque artibus, aut sunt proprii, quamvis plures eorum sunt communes. Sicque discernemus id, quo erunt proprii; attamen normae, quibus utuntur syllogistici topicus, rhetorici non sunt necessariae ad addiscendum artes perfecte, et praecipue Rhetorica, et Poetica, quia non sunt necessariae ad addiscendum artes speculativas."

<sup>31</sup> To some extent, this would seem to be equally damaging to dialectic. For in the *Kutāb al-jadal*, 37.6–7, Fārābī tells us that because dialectic gives its practitioner the capacity to widely-accepted beliefs (*al-mashhūrāt*), it is the only art by which one can develop ability in "external and exoteric philosophy" (*al-falsafah al-khārijah wa-al-barānīyah*). Fārābī goes on to link external philosophy to the political nature of human beings, and to the philosopher's consequent need to be friendly and communicate with the masses (36.16–37.11). However, dialectic's philosophical utility is not limited to this communicative role; rather, Fārābī lists, in the same chapter of the *Kutāb al-jadal*, a multitude of useful functions that dialectic can play within philosophy itself, especially as a propaedeutic to demonstration (29.16–38.3). Hence dialectic's status, at least where Fārābī is concerned, is not affected by the considerations we have discussed in the present section to the same extent as are rhetoric and poetics.

### 3. Inquiry, Instruction, and Contemplation

The question of the extent to which the ideal of demonstrative science, as set forth in Aristotle's *Posterior Analytics*, is in practice the proper or primary method for philosophy, or indeed the method employed in Aristotle's own philosophical investigations, is one that has preoccupied many scholars working both on Aristotle and on the Aristotelian tradition. Many have drawn attention to the fact that most of the extant Aristotelian corpus fits more accurately the paradigm of dialectic than it does that of demonstration, and that demonstration itself represents an ideal only narrowly realized, primarily in the mathematical sciences.<sup>32</sup>

Similar concerns arise when we examine the Islamic philosophers' conception of the role of demonstration and its relation to the overall pursuits of philosophy. As with the controversies surrounding Aristotle's concept of demonstration, the issues that are of special concern in the Arabic context are centered around determining the nature of philosophical inquiry. But these basic Aristotelian issues are further complicated by the historical conditions of Arabic philosophy, and the need to accommodate the Aristotelian model itself into the conception of philosophy. For the rediscovery of the Aristotelian corpus, and the awareness of the historical evolution of philosophy among the Greeks, alters somewhat the Islamic philosophers' construal of the relationship between inquiry, instruction, and contemplation within the philosophical disciplines. As the recipients of a large body of apparently ready-made demonstrative sciences, the philosophers of the Islamic tradition envisage their task less as one of inquiry, and more as one of learning and teaching, revising where necessary, and contemplating and applying the knowledge thus acquired. This too will have its effects upon the context theory, and these effects will be ambivalent ones. For the apparent success of the Stagirate in attaining the demonstrative paradigm in philosophy contributes to the suggestion, already present among the Alexandrians, that the other logical arts are by and large superfluous. And yet the consequent emphasis upon instruction and communication, the forte of rhetoric and poetics, suggests a heightened awareness of the dependence of demonstrative science upon post-demonstrative methods.

Of the major Islamic philosophers, it is Fārābī who provides the most systematic and illuminating discussions of the respective roles of inquiry and instruction within philosophy itself, in the context of his historico-anthropological speculations on the origins and development of philosophy in three

<sup>32</sup> See the first part of G.E.L. Owen, "Tithenai ta Phainomena," in *Aristote et les problèmes de méthode*, ed. Suzanne Mansion, Communications présentées au Symposium Aristotelicum 24 tenu à Louvain du 24 août au 1<sup>er</sup> septembre 1960, 83–103 (Louvain: Publications Universitaires; Paris: Béatrice-Nauwelaerts, 1961), reprint in *Articles on Aristotle*, vol. 1, *Science*, ed. Jonathan Barnes, Richard Sorabji, and Malcolm Schofield (London: Duckworth, 1975), 113–26. For an overview of the various positions on this matter, and an alternative interpretation of the nature of demonstration, see Jonathan Barnes, "Aristotle's Theory of Demonstration," *Phronesis* 14 (1969): 123–52 (reprint in *Articles on Aristotle*, vol. 1, *Science*, 65–87).

works in particular: the *Kitāb al-ḥurūf*, *Kitāb al-khaṭābah*, and the *Kitāb al-jadal*.<sup>33</sup>

The *Kitāb al-ḥurūf* is a particularly useful text for examining the fate of inquiry as a philosophical pursuit, since the whole of its third and concluding part is devoted to a detailed study of the various interrogative particles and how they are used in philosophy and in other disciplines.<sup>34</sup> Yet despite Fārābī's obvious interest in the nature of investigation and its linguistic tools, his remarks in the earlier parts of the text raise some fundamental questions about the extent to which interrogative particles, when used in philosophy, signify a truly investigative intention. It is clear that Fārābī considers the use of the interrogative mood to be an indication that the speaker is in some way undertaking a search for causes. In fact, Fārābī explicitly distinguishes the use of interrogative particles in demonstration, dialectic, and sophistry from their use in rhetoric and poetics, on precisely these grounds. Only the arts of demonstration, dialectic, and sophistry use interrogative particles literally, in order to pose a question, with a view either to eliciting a response from the listener, or to establishing in the questioner himself true causal knowledge. In rhetoric and poetics these particles are only used metaphorically, by way of embellishment and in order to display mastery of the language. The poet and orator do not seek a cause or an answer from their audience, nor even from themselves, when they pose questions. Their queries are, as we would say, common parlance, merely "rhetorical questions."<sup>35</sup> Still, although the use of the mode of questioning in the art of demonstration is a literal one, it is also obvious that in Fārābī's view the literal function of interrogative particles is not that of inquiring into hitherto undiscovered causes, in order to unveil truths and establish them with certitude. The role of such particles is instead to define the various types of causal explanations that are possible, as they might be embodied in a response to the question, and to indicate whether the pupil is to provide a *ḥurūf* or a *ḥurūf* demonstration.<sup>36</sup> When the philosopher poses the question "why?" for example, he is indicating that his concern is not only with the fact of an object's existence, but also with its causes.<sup>37</sup> There need be no implication that those causes as yet remain a mystery, or that

<sup>33</sup> We have chosen Fārābī as our focus here because he develops the theme of the historical evolution of philosophy in the greatest detail. Avicenna's views on the history of philosophy and his own place in it, betray concerns similar to those of Fārābī, but Avicenna's position on the completeness of philosophy's evolution is complicated by his developing consciousness of his own place within that history. For a detailed consideration of Avicenna's view of his place in history, see Gutas, *Avicenna and the Aristotelian Tradition*, 198–218, 286–96. Gutas also provides translations of relevant texts, in particular the Epilogue to *Al-Safāṭah* (Sophistics) of *Shifā'* (Gutas, 34–38), and the Introduction to *Al-Manṭiq al-mashrūqīyīn* (Logic of the Easterners) (Gutas, 44–49).

<sup>34</sup> The discussion of the interrogative particles occurs in §§159–251 of the *Kitāb al-ḥurūf* 162–226. A shorter and somewhat different discussion of interrogative particles is found in *Kitāb al-jadal*, 45.17–48.16.

<sup>35</sup> *Kitāb al-ḥurūf*, §§ 249–51, 224.20–226.21.

<sup>36</sup> *Ibid.*, §215, 204.15–19.

<sup>37</sup> *Ibid.*, §215, 204.8–9.

answers he gives will be entirely novel. The interrogative particle merely defines the scope of the causal explanation being offered, or at most, it may serve a heuristic function, if the task at hand is to aid the philosophical novice in his personal acquisition of demonstrative knowledge.<sup>38</sup>

The restrictions that have been imposed here upon the demonstrative functions of interrogative particles appear to be necessitated by an earlier section of the *Kitāb al-ḥurūf*, which, along with parallel passages in other texts, contains Fārābī's account of the historical genesis of philosophy. Fārābī envisages the development of philosophy as essentially a matter of methodological advancement. Its stages are marked by the gradual progression of methods of inquiry, from a disorganized and undirected groping for truths using rhetorical and poetical methods,<sup>39</sup> through the eventual development of the more advanced methods of sophistic and dialectic, until finally the demonstrative method is developed, and recognized as the ideal towards which all the earlier methods were striving.<sup>40</sup> That such an ideal has indeed

<sup>38</sup> In §221 of the *Kitāb al-ḥurūf* (209.1–17), Fārābī gives mathematics as an example of a completed science which requires no further investigation, because it has fully attained the status of demonstration. In such a science, Fārābī says, questioning becomes nothing more than a pedagogical tool: "For the questioning of the pupil by the teacher is not research, or investigation, or inquiry about what the teacher says, but rather, [the question] is only posed either to make the meaning of something in the art be conceived or understood [by the pupil], or to make him certain of the existence of this thing, or of the cause of its existence as well, in order that the demonstration of the thing about which questions are posed be attained by [the pupil]. The first [aim is attained] by the particle 'what,' the second by the particle 'whether' and what takes its place, and the third by the particle 'why' and what takes its place, or by means of some particle whose force is that of 'whether' and 'why' together, if this should be found in some language." On this passage cf. Georges Vajda, "Langage, philosophie, politique et religion d'après un traité récemment publié d'Abū Naṣr al-Fārābī," *Journal asiatique* 258 (1970): 254. On the topic of the completion of mathematics, contrast the attitude of Maimonides, as discussed by Joel Kraemer, "Maimonides on Aristotle and Scientific Method," in *Moses Maimonides and His Time*, ed. Eric L. Ormsby, 53–88, *Studies in Philosophy and the History of Philosophy*, vol. 19 (Washington, D. C.: The Catholic University of America Press, 1989), 60–61, 78–79.

<sup>39</sup> The place of poetics in the historical development of demonstrative methods is somewhat unclear, as Muhsin Mahdi has noted in "Alfarabi on Philosophy and Religion," *The Philosophical Forum* 4 (1972): 10. Both pre- and post-demonstrative uses of poetics are recognized in the *Kitāb al-ḥurūf*, pre-demonstrative uses in §§129–30 and §138, post-demonstrative uses in §§143–44. But poetics does not figure explicitly in the actual account of the evolution of demonstrative methods in §§140–43. And poetics is not mentioned at all in the parallel account of the history of philosophy offered in the *Kitāb al-khaṭābah* (see n. 49 below); similarly, in the *Kitāb al-jadal*, while poetics is implicitly included among the syllogistic arts (there are five syllogistic arts according to 57.17), it does not figure at all in the ensuing discussion of the hybrid syllogisms that are found in the earlier stages of philosophy's development. This does not, however, imply that poetics is not truly a syllogistic art in Fārābī's view. Rather, since the syllogistic structure of poetics is only potential (*Qawānīn al-shī'r*, 268.16–18), poetic discourses cannot directly evolve into rhetorical, dialectical, and hence demonstrative, syllogisms, for they do not possess openly the structure that allows them to partake of the oppositional and adversarial movements that are crucial, in Fārābī's view, to the development of superior logical methods.

<sup>40</sup> This represents a very general synopsis of the account given in §§129–46 of the *Kitāb al-ḥurūf* (142.5–153.11). Excerpts from this discussion are translated by L. V. Berman in "Maimonides, The Disciple of Alfarabi," *Israel Oriental Studies* 4 (1974): 171–78. The related and important discussion of the relationship between religion and philosophy in this account,

been realized, and that inquiry has ceased to be of paramount concern in philosophy, is clearly indicated by Fārābī's description of the state that philosophy had reached by Aristotle's time:

Then these matters became widely-discussed, until the state of affairs that exists in the days of Aristotle became well-established. And scientific speculation *naẓar al-ilmī* reached its apex, and every method was distinguished, where universal speculative and popular philosophy were perfected, and there remained in them no subject of investigation. So [philosophy] became an art that one man learns and teaches. And there is a teaching of it which is a special one, and a teaching common to all. And the special teaching is by means of demonstrative methods alone, and the common is that which is popular, and is by means of dialectical, rhetorical or poetic methods. However, the rhetorical and the poetic are more suited to being used in instructing the masses in the belief that has been established and verified by demonstration, in theoretical and in practical things.<sup>41</sup>

The impression created by such an account is generally reinforced by Fārābī's other works. The discussions of the *Falsafah Aflāqun* (Philosophy of Plato) and the *Falsafah Aristūʾālīs* reflect the same conception of the history of philosophy, as a progression from the use of unreliable poetical methods to the development of demonstration. Fārābī's Plato, for example, undertakes a systematic and critical evaluation of each of these methods in the individual dialogues: poetics in the *Ion*, rhetoric in the *Gorgias*, and sophistry in the *Sophist* and *Euthydemus*. But Plato was able to reach no further than the perfection of the dialectical methods, leaving Aristotle with the task of completing the development of demonstrative science.<sup>42</sup> The *Kitāb al-jadal* p

and in §§108–11, does not concern us at present; it is discussed in some detail by Muhsin Mahdi in "Alfarabi on Philosophy and Religion," 2–25. See also Georges Vajda, "Langue et philosophie, politique et religion," 245–60.

<sup>41</sup> *Kitāb al-hurūf*, 151.17–152.6. Averroes too, in his *Epitome in libros logicae*, 62a, emphasizes the perfection of the logical arts in his time: "... artibus perfectis secundum quod sunt artes hoc nostro tempore."

<sup>42</sup> *Falsafah Aflāqun* (Philosophy of Plato), ed. Franz Rosenthal and Richard Walzer, *Philosophy of Plato*, vol. 2 (London: Warburg Institute, 1943); trans. in Mahdi, *Alfarabi's Philosophy of Plato and Aristotle*, 51–67. See also *Kitāb al-khaṭābah*, 55.5–57.9. In the latter account of the evolution of demonstrative methods, Fārābī credits Plato with being the first to become aware of demonstration and distinguish it from other methods. But Fārābī adds that Plato did so only in practice, as a result of his natural philosophical genius. It still remained for Aristotle to systematize demonstration into a body of "universal rules" (*qawānīn kullīyah*). Cf. *Kitāb al-ilm*, 110.5–111.2 (translated and discussed by Gutas, "Paul the Persian," 258–59). References to the historical development of logical methods are also scattered throughout the *Kitāb al-jadal*, 19.6–8, 25.15–26.1, 27.13–18, 60.22–62.10.

The notion that philosophy has been completed appears somewhat more tentative in the *Falsafah Aristūʾālīs*. The last paragraph refers to "our defective natural science" (*mā naqashna al-ilm al-tabīʿī*), and adds that "we do not possess metaphysical science" (*idh lam yakun mā naʿalladhī baʿda al-tabīʿī*) (132.15–133.1, Mahdi trans., 130). It is not clear whether Fārābī is making a general claim about all philosophers, or only about the Arabic philosophical tradition. For a discussion of Fārābī's position on Aristotle's metaphysical accomplishments, see T. Druart, "Al-Farabi and Emanationism," in *Studies in Medieval Philosophy*, ed. J. F. Wippel, *Studies in Philosophy and the History of Philosophy*, vol. 17 (Washington, D. C.: Catholic University of America Press, 1987), 23–43; M. Galston, "A Re-examination of al-Farabi's Neoplatonism," *Journal of the History of Philosophy* 15 (1977): 13–32.

sents the same basic pattern of historical development, while focusing primarily on the place of dialectic and sophistry, and omitting the mention of rhetoric and poetics. While past philosophers of necessity used a hybrid method that mixed the wine of demonstration with the water of dialectic and sophistry, the attainment of the demonstrative ideal by Aristotle makes such methods into at best the servants of truly scientific methods:

And the philosophical, that is, the certain, sciences, always use, in proving all of their objects of inquiry, the scientific syllogisms which we mentioned. And the mixed method, which we mentioned, is that which was the method of philosophy in the past, until the three methods were distinguished from one another, and divided into scientific, dialectical, and sophistic. And the scientific methods were attained, and they became the scientific art, and they are the end which was intended (*al-ghāyah al-maqsūdah*). And the dialectical art became a [method of] training (*iriyādan*), and an introduction to it, and a tool and servant of the scientific art. And the sophistical remained an imitation of the dialectical and a resemblance of it, and was supposed to be dialectical; sometimes it was [even] imagined to be philosophy.<sup>43</sup>

The *Kitāb al-alfāz al-mustaʿmalah fī al-mantiq* (Utterances employed in logic) offers further confirmation that Fārābī's belief in the completion of philosophy transforms logic into a pedagogical instrument rather than a tool for inquiry. Fārābī devotes the latter half of this treatise to a discussion of various logical methods for causing conception and assent, such as the syllogism, induction, example and so on. This discussion is presented, however, as a preliminary consideration of methods of instruction or teaching (*al-taʿlīm*), and throughout the emphasis is upon the use of these tools in a teacher-pupil relationship.<sup>44</sup>

The notion that Aristotle's theory of demonstration is intended to provide a method that is primarily pedagogical is not itself foreign to contemporary Aristotelian scholarship. In fact, the instructional role of demonstration is one of the more prominent solutions offered to explain the difference between the theory of the *Posterior Analytics* and the practice of the Aristotelian treatises themselves. One proponent of such an interpretation even suggests that the reason for this is the Stagirite's own optimism that in his day most of the sciences were nearing completion.<sup>45</sup> And there are strong textual arguments in favour of Fārābī's view as well. The opening lines of the *Poste-*

<sup>43</sup> *Kūb al-jadal*, 27.12–18.

<sup>44</sup> See, for example *Kūb al-alfāz*, 86.11–17. Principles of instruction also figure prominently in the *Kitāb al-burhān* (Demonstration), ed. Majid Fakhry, in vol. 4 of *Al-mantiq ʿinda al-Fārābī*, 77.1–90.16. See also *Taḥṣīl al-saʿādah*, 90.3–91.13, Mahdi trans., 44. For a discussion of the educational role of the philosopher in Fārābī, see Hans Daiber, *The Ruler as Philosopher: A New Interpretation of al-Fārābī's View* (Amsterdam and New York: North Holland, 1986), 7–8. For a general discussion of the theme of instruction in Fārābī's logical writings from the point of view of educational theory, see F. S. Haddad, "An Early Arab Theory of Instruction," *International Journal of Middle East Studies* 5 (1974): 240–59.

<sup>45</sup> Barnes, "Aristotle's Theory of Demonstration": "But in this respect Aristotle was an optimist; he thought that he was at the end of the world and he believed that the majority of the sciences were complete or nearly complete" (147).



*rior Analytics* themselves refer explicitly to a pedagogical setting: "All teaching (διδασκαλία) and all intellectual learning (μάθησις διανοητική) come about from already existing knowledge."<sup>46</sup>

Whatever the extent of the Aristotelian roots of Fārābī's vision of the role of demonstration, it poses some rather paradoxical ramifications for the local interpretation of rhetoric and poetics. On the one hand, the theme of completion of philosophy should, to a large extent, close the gap between demonstration and the rhetorical and poetic arts, especially in the light of the communicative aim associated with the latter. In a scheme in which it has been suggested that philosophy is a completed science, demonstrative logic itself appears to shift its focus to an essentially communicative end—that of propagating a systematic body of philosophical knowledge to those who are incapable of comprehending it.<sup>47</sup>

On the positive side, then, the emphasis upon instruction seems to narrow the gap between demonstration and the non-demonstrative arts, to the extent that all methods will have as their ultimate end the communication of a single body of truths revealed by previous investigations. Moreover, the reduction of philosophy to an art "that one merely learns and teaches" does not eliminate completely the philosopher's dependence upon the more tentative methods of inquiry. For even if we grant Fārābī's belief that Aristotle had perfected philosophy for humanity as a whole, each individual philosopher will still have to reach his own personal understanding of the knowledge unveiled by the Stagirite. And to do this, he will have to inquire and investigate the philosophical problems for himself, although his task will be, on Fārābī's assumption, immensely easier than that of the philosophical pioneers. As Fārābī

<sup>46</sup> *Posterior Analytics* 1.1.71a1–2 (1:114).

<sup>47</sup> In her article "Al-Fārābī on Aristotle's Theory of Demonstration," Galston offers a similar view of demonstration as an art relegated by Fārābī to the role of a tool of instruction, with a "less central role in the pursuit of truth" (31). Although our interpretation of the role of demonstration according to Fārābī concurs with Galston's, her explanation of Fārābī's motivation in holding this position does not seem tenable. Galston believes that Fārābī's tone and vocabulary when referring to demonstration is often hypothetical and tentative, and that this can be taken as a sign that he views demonstration as an ideal model for argumentation and inquiry, which is seldom attainable in practice. The evidence presented to illustrate Fārābī's tentativeness is, however, highly speculative. More importantly, it seems difficult to reconcile Galston's interpretation with Fārābī's many confident proclamations that demonstrative philosophy had already been completed by Aristotle. In the discussion of the *Kiṭāb al-hurūf* in a more recent "Alfarabi et la logique aristotélicienne," 199–202, Galston seems more aware of this aspect of Fārābī's thought, although she remains somewhat ambiguous regarding his position on the closure of philosophy. Thus she suggests that Fārābī is merely reporting the complacency of post-Aristotelian generations who "thought that [logic] had arrived at perfection and that there was nothing left but to teach and learn it, like an art to which nothing important could be added" (199, emphasis added). But Fārābī's language in the relevant passage of the *Kiṭāb al-hurūf* (§143) in no way suggests that this is a description of other people's views, and not of Fārābī's own. The *Kiṭāb al-khaṭābah* (55.5–57.9) does attribute the decision to relegate the non-demonstrative methods to an ancillary role in the search for certitude to post-Aristotelian philosophers, but Fārābī appears to approve of this decision, since he asserts categorically that Aristotle had perfected demonstrative methods.

himself hints, "philosophy must necessarily come into being in every man in the way possible for him."<sup>48</sup>

It is clear, however, that the philosopher's personal need to emulate in some way the original process by which demonstrative truths were discovered preserves for rhetoric and poetics only a very minor role in philosophical pursuits. In Fārābī's history of philosophy, these arts were no more than stepping stones on the way to demonstration; they can scarcely be any more than this in the philosopher's personal reenactment of that history. Once the various methods of logic have been discovered and delineated, the superiority of demonstration does not permit the philosopher to be satisfied with the other arts, at least not for his own use. This is already clear from the *Tahṣīl al-sa'ādah*, and its firm denial that the mastery of rhetorical and poetical methods can offer any personal satisfaction to the philosopher *cum* statesman who uses them for the sake of the masses. Once the demonstrative method has been discovered, the other branches of logic serve primarily as means for making the same truths palatable to the non-elite. Whatever propaedeutic role does remain for them *within* philosophy is secondary, and severely limited.<sup>49</sup>

The belief that philosophy can be, and has been, perfected has thus added a new twist to the Alexandrian assumption that the goal of demonstration is attainable in all cognizable matters, and that the utility of the non-demonstrative arts is completely exhausted by their role as supplements to demonstration. It is, of course, difficult to assess which elements in Fārābī's position are the necessary consequences of his apparent optimism regarding philosophy.

<sup>48</sup> *Falsafah Aristūṭālīs*, 133.2–3, Mahdi trans., 130.

<sup>49</sup> In the *Kiṭāb al-khaṭābah*, Fārābī claims that after Aristotle had systematized demonstration, philosophers abandoned the use of all other methods in their search for certain knowledge of speculative matters. Dialectic thus became a method to be used solely for the purposes of training and practice (*al-riyāḍah*—Langhade's translation of the term as "mathématiques" is incorrect in this context); sophistic came to be used only as a preventative against error; and rhetoric was limited to the task of communicating to the masses, and to the political realm in general. Poetics is not mentioned in this passage (57.1–9). Cf. *Iḥṣā' al-'ulūm*, 89.6–91.13, Palencia, 143.9–144.29. On the role of dialectic see also *Kiṭāb al-jadal*, 52.6–16 (which refers explicitly to the perfection of logic), and *Kiṭāb al-burhān*, 85.18–22; 94.6–14. For the most part, the *Kiṭāb al-jadal* is somewhat more generous in its view of the utility of dialectic (29.16–38.3), though training figures prominently among the five uses of the art recognized by Fārābī. Uses (1) through (3) all represent various aspects of preparation for the acquisition of certain science; use (4) relates to communication, usurping somewhat the role reserved elsewhere for rhetoric and poetics; and use (5) relates to the preservation of philosophy against sophistry. Similar roles are assigned to dialectic by the other Islamic philosophers. Averroes, for example, emphasizes the training role of dialectic, and expresses considerable skepticism about its purported utility as an aid to demonstration in the discovery of first principles. See *Jawāmi' al-jadal*, §21, 164.13–166.7, trans. 54–55; see also Butterworth's comments on the passage, 116 n. 4. For a brief discussion of Averroes' views on dialectic, see Kraemer, "Maimonides on Aristotle," 87–89. Kraemer argues that it is a "common misconception" that Maimonides, as well as Fārābī and Averroes, had a "low opinion" of dialectic and its practitioners, and cites as evidence these philosophers' common view that dialectic is useful as a propaedeutic to philosophy, as well as for communication with the masses. While these assertions are certainly correct, dialectic nonetheless remains ancillary, as do rhetoric and poetics. The philosopher does not concern himself with dialectic *gratia dialecticae*, but only *gratia demonstrationis*.



phy's perfected state. Does his picture of the history of philosophy itself necessitate the subordination of rhetoric, poetics, and the other arts to demonstration, as Fārābī appears to hold?

Fārābī ought to be given a great deal of credit for his astute observation on the development of philosophy. That the earlier philosophers used myth, poetry, rhetoric, and the like as substitutes for more refined methods paints a fairly accurate general picture of pre-Socratic speculation. It is also evocative of Aristotle's observations in *Metaphysics A* that the love of myth stems from the same impulse of wonder as does philosophy.<sup>50</sup> As for the notion that Plato reached only the level of dialectic, and left it to Aristotle to develop both syllogistic and demonstration, this concurs remarkably well with many contemporary discussions of the Platonic roots of Aristotelian logic.<sup>51</sup> But it does not follow from Fārābī's historical account that the non-demonstrative methods themselves are essentially stages in the ascent to demonstration. Nor does it follow that after demonstration has been developed, these methods remain useful only to the extent that they continue to serve the interest of demonstration, as propagative tools. That rhetoric and poetics were only used to perform tasks for which they were ill-suited does not, in sum, imply that they have no proper tasks of their own, nor does it imply that the proper tasks are no longer of any importance to the philosopher.

It is the linear and progressive outlook implicit in Fārābī's historical approach, then, that apparently prevents him from recognizing any autonomous role for rhetoric and poetics.<sup>52</sup> The history of philosophy is seen as a struggle to develop a truly demonstrative science, and once the philosopher has this supreme tool at his disposal, it seems perverse for him to revert to methods that mere necessity once foisted upon him. But if there are dimensions of rhetoric and poetics that have been overlooked in this account, because they did not come into play in the developmental process, then Fārābī's position and similar views, will have to be reexamined. For only on the assumption

<sup>50</sup> *Metaphysics A.2.982b18-19.*

<sup>51</sup> This is not to suggest that Plato's conception of dialectic is the same as that of Aristotle, but only that the Islamic philosophers also recognized what is commonly accepted by most historians of ancient philosophy, that is, that Aristotle used Platonic dialectic as a starting point for his own logical speculation. From this, the Islamic philosophers assume that it is reasonable to treat Platonic dialectic as identical with the method studied in Aristotle's *Topics*. Consequently, they hold that Aristotelian demonstration represents an advancement over Plato rather than an alternative to him.

<sup>52</sup> Many scholars have acknowledged the progressive strain in the Arabic tradition's view of the history of philosophy, but have associated that progressive strain with the belief in the limitations of philosophy, or at least its openness to correction. See for example Kraemer, "Maimonides on Aristotle," 80; Galston, "Al-Fārābī on Aristotle's Theory of Demonstration" and "Al-Fārābī et la logique aristotélicienne" (see n. 47 above); and Gutas, *Avicenna and the Aristotelian Tradition*, 210, 218. What has not been recognized is that the progressive view of the history of philosophy in and of itself does not fully determine any philosopher's position on the level of evolution that philosophy has attained at a given moment in history. Two philosophers can concur that philosophy is progressive and perfectible, but differ in their views on whether or not Aristotle had already attained perfection. Strictly speaking, then, it is as much the interpretation of the facts of history, as it is the simple belief in its progressive character that determines the issue under consideration here.

that rhetoric and poetics are merely imperfect reflections of demonstrative science can Fārābī maintain that these arts offer no additional personal benefit to the philosopher, *qua* philosopher, or even *qua* human being.

#### B. TAŞAWWUR AND TAŞDĪQ (CONCEPTION AND ASSENT)

Within the general discussions of the nature and purpose of logic in the Arabic tradition, the couplet of *taşawwur* and *taşdīq* figures prominently. These two terms, which we will render as "conception" or "concept formation" and "assent," express for the Islamic philosophers the two basic cognitive acts which logic seeks to produce. Both terms are widely discussed in the logical and psychological writings of all three philosophers, and can justifiably be viewed as the cornerstones of medieval Arabic epistemology.<sup>53</sup>

Although it is not our purpose to give a detailed account of the general role that this couplet plays in Islamic logic, the basic features of these two epistemological concepts are quite central for an understanding of the Arabic developments of the context theory.<sup>54</sup> The term *taşawwur* refers to the act of the mind by which concepts are comprehended as unified (though not necessarily simple) wholes, and for this reason the Arabic philosophers usually identify the primary object of *taşawwur* as an essence or quiddity. In the *Kitāb al-burhān*, for example, Fārābī identifies perfect conception as the understanding of something "by means of what extracts its essence (*bi-mā yulakhkhiṣu dhāta-hu*) in a manner which is proper to it."<sup>55</sup> Avicenna refers in the *Najāh* to our conceiving the "whatness" (*māhiyah*) of some object, such

<sup>53</sup> For conception and assent in Fārābī, see *Kitāb al-burhān*, 19.4-21.12, and *passim*. (Portions of this text [19.4-21.12], along with a long selection from the *Kitāb al-jadal* [17.5-25.15; 71.13-72.7] are translated into French by Georges Vajda, in "La théorie de connaissance chez Saadia," from the earlier edition by M. Türker of the first few pages of the *Kitāb al-burhān*, and from the manuscripts of the *Kitāb al-jadal*. For the texts that concern us here, see 390-93.) See also *Tahṣīl al-sa'ādah*, 90.3-12, Mahdi trans., 44 (in this text *taḥṣīm* 'to make understood' is used instead of *taşawwur*); and throughout §§40-50 of the *Kitāb al-alfāz*, 86.11-94.14. For Avicenna, see especially *Al-Shifā'*, vol. 1, pt. 1, *Al-Madkhal* (Isagoge), ed. G. Anawāṭi, M. El-Khadeiri, and F. al-Aḥwānī, rev. I. Madkour (Cairo: Al-Maṭba'ah Al-Amīriyah, 1952), 17.7-19.7; *Najāh*, Q3.7-4.6, 60.12-22; T7.2-8.6, 112.5-113.6; *Ishārāt*, 3.15-4.11, Inati trans., 49. There is also a discussion of these concepts in the *Uyūn al-masā'il* (Principal questions), a work formerly attributed to Fārābī, but now generally believed to be the work of a disciple of Avicenna; the *Uyūn* is edited by F. Dieterici in *Alfarabi's Philosophische Abhandlungen*, 56.13-23. See also Amélie-Marie Goichon, *Lexique de la langue philosophique d'Ibn Sīnā* (Paris: Desclée De Brouwer, 1938), s.v.

<sup>54</sup> For a more general consideration of these two concepts, see H. A. Wolfson, "The Terms *Taṣawwur* and *Taṣdīq* in Arabic Philosophy and their Greek, Latin and Hebrew Equivalents," *The Moslem World* 33 (1943): 1-15; reprint in H. A. Wolfson, *Studies in the History of Philosophy and Religion*, ed. I. Twersky and G. H. Williams, 2 vols. (Cambridge: Harvard University Press, 1973), 1: 478-42; Van Ess, *Die Erkenntnistheorie*, 95-113; A. I. Sabra, "Avicenna on the Subject Matter of Logic," *Journal of Philosophy* 77 (1980): 757-62; C. E. Butterworth, *Averroes' Three Short Commentaries*, 103 nn. 1-2.

<sup>55</sup> *Kitāb al-burhān*, 20.2-3, Vajda, "La théorie de connaissance chez Saadia," 390; cf. 84.10-15.

as "human being."<sup>56</sup> In the same vein, he often speaks of conception as an act of understanding the underlying meaning or "intention" (*al-ma'nā*) words, by which they signify "the reality of the essence of the thing" (*ḥaqīqat dhāt al-shay*).<sup>57</sup> Similarly, in the Latin translation of Averroes' *Epitome in libros logicae*, the object of conception is referred to as *substantia*, a term Wolfson suggests translates the Arabic *dhāt* 'essence'.<sup>58</sup>

It is important to note, however, that *taṣawwur* is not confined to the act of grasping simple, uncomposed concepts. Although the most fundamental function of conception is manifested in the knowledge of simple essences and intentions, its activity is primarily defined by negative criteria. This is not to say that conception itself is a form of negation or denial, for the descriptions of *taṣawwur* that we have cited indicate clearly that the comprehension of positive conceptual content is always involved. But the distinctive role of conception in human thought is best characterized by its contrast with the act of assent.<sup>59</sup> Ultimately, this means that conception applies to any cognitive act that does not presuppose the assignment of a truth-value to some proposition. Thus, in his discussion of *taṣawwur* in the *Madkhal*, Avicenna is able to classify the cognitive act generated by non-apophantic discourse in general as a form of conception: one of the examples of conception he provides is the command, "Do this!" (*if'al kadhā*).<sup>60</sup> In the *Najāh*, moreover, Avicenna intends this point to include those occasions where one entertains the idea

<sup>56</sup> *Najāh*, Q3.9, T7.4. The *Ishārāt* gives as an example the concept "triangle" (3.16, in trans., 49).

<sup>57</sup> *Madkhal*, 18.11–13. For the identification of the object of *taṣawwur* as the meaning signified by a word, cf. *Madkhal*, 17.7–8: "When [the thing] has a name which is pronounced, meaning is represented in the mind" (*idhā kāna la-hu ismun fa-nuṭīqa bi-hi, tamaththil ma'nā-hu fī al-dhihn*); and 17.11 (*taṣawwur ma'nā hadhā al-qawf*). See also *Ishārāt*, 3.16 (*idhā kāna bi-ma'nā ismin*), and 4.1 (*yutaṣawwiru ma'nā-hu*); and *Najāh*, Q60.13, T112.6 (*taṣawwur ma'nā mā*). Fārābī speaks of conceptions which are produced by a single expression that signifies the thing, but says that these sorts of conceptions are the least perfect; perfect conception requires a definition as its cause (*Kitāb al-burhān*), 45.4–5.

<sup>58</sup> Averroes, *Epitome in libros logicae*, 36b: "Et fuit formatio [i.e. *taṣawwur*] id, quod est intellectus rei per id quod constituit substantiam suam . . ." See also Wolfson, "Taṣawwur in Arabic Philosophy," 479, 491 n. 23. *Substantia* does not seem a natural translation of *dhāt*, but Wolfson's suggestion makes sense in the light of the Arabic texts of other philosophers.

<sup>59</sup> The tendency to define the meaning of *taṣawwur* in negative terms is evident in Avicenna's frequent use of an emphatic *faqat* 'only . . . and no more' at the end of his definitions, e.g. in *Madkhal*, 17.7 and 17.11. Similarly, the *Ishārāt* speaks of "pure conception" (*taṣawwur sādhij*) (3.16); and the *Najāh* of "conception without assent" (*taṣawwur bi-lā taṣdīq*) (Q60.11, T112.7).

The tendency to define *taṣawwur* in terms of its contrast with *taṣdīq* does not imply that the two are in some sense opposed to one another. Rather, it is the result of the simple fact that *taṣawwur* is a necessary, but not a sufficient, condition for *taṣdīq*. For this reason, Van Ess's concern regarding the effect that Avicenna's occasional use of *takdhīb* 'falsification,' has upon the contrast between *taṣawwur* and *taṣdīq* seems misplaced, since the two concepts are not really in opposition to one another in the way that assent and falsification are. For one can, and must, simultaneously conceive of any proposition that one assents to. It is impossible, however, to assent to and falsify one and the same proposition simultaneously. On this point, see Avicenna, *Erkenntnislehre*, 100.

<sup>60</sup> *Madkhal*, 17.9.

someone assenting to the proposition "X exists," without actually confirming that judgement oneself.<sup>61</sup> In the light of the *De interpretatione*'s assignment of non-apophantic discourse to the realm of rhetoric and poetics, these remarks of Avicenna would seem to suggest that it is to *taṣawwur* that we ought to look for an account of the cognitive acts underlying rhetoric and poetics. There are indications, at least in the case of poetics, that Fārābī and Averroes sometimes inclined towards such an interpretation of poetic *takhyīl*, and we will examine their positions on this matter in a later chapter.<sup>62</sup> But Avicenna himself shows no such inclination to assimilate either art to the act of conception, nor does such a construal of poetics predominate in the writings of the other two philosophers.

It is thus the notion of *taṣdīq* that is of central importance in the Arabic philosophers' efforts to give a logical interpretation to the rhetorical and poetical arts. The term *taṣdīq* is usually rendered as "assent," "judgement," and sometimes "belief." In medieval Latin translations, *taṣdīq* was sometimes translated as *verificatio*, (suggesting affinities with Fārābī's notion of *taṣhīḥ* 'verification'), and sometimes as *credulitas* or *fides*.<sup>63</sup>

It should already be apparent from the contrast of conception with assent that *taṣdīq* is in some way the epistemological counterpart of apophantic discourse. That is, as with apophansis, the defining feature of an act of *taṣdīq* is that it can and must possess some truth-value.<sup>64</sup> More specifically, the Arabic philosophers link assent to the affirmation or denial of the existence of the thing conceived, or to the judgement that it exists in a certain state, with certain properties: "Assent in general is for a person to believe of a matter about which he makes a judgement that it is, in its existence outside the mind, just as it is believed to be in the mind."<sup>65</sup> From this characterization, it

<sup>61</sup> *Najāh*, Q60.13–14, T112.6–8: "And sometimes there is conception without assent, such as when someone conceives of the words of someone saying 'The void exists,' but he does not assent to it." On this point cf. Goichon, *Lexique* 191, s.v. *taṣawwur*. Heinrichs, "Die antike Verknüpfung," 290 refers to this Avicennian point to explain some anomalous features of Fārābī's doctrine of poetic *takhyīl*.

<sup>62</sup> See chap. 6 below, 185–92.

<sup>63</sup> For the Latin translations see Goichon, *Lexique*, s.v.; Wolfson, "The Terms *Taṣawwur* and *Taṣdīq*," 490; and Van Ess, *Die Erkenntnislehre*, 95. *Verificatio* appears in Averroes' *Epitome in libros logicae*, 36b–37a. *Credulitas* appears to translate *taṣdīq* in Fārābī's *Didascalia in Rethoricam Aristotelis*, ed. M. Grignaschi, in *Deux ouvrages inédits sur la Rhétorique*. See 156 n. 5, and Grignaschi's index, s.v. *credulitas* (254).

<sup>64</sup> On the relation of *taṣdīq* to Aristotle's ἀποφαντικός λόγος see Wolfson, "The Terms *Taṣawwur* and *Taṣdīq*," 483–84, 490.

<sup>65</sup> Fārābī, *Kitāb al-burhān*, 20.4–5; Vajda, "La théorie de connaissance chez Saadia," 391. In the *Kitāb al-alfāz*, Fārābī speaks of "assent to the existence of that which has been conceived or understood" (*al-taṣdīq bi-wujūd mā taṣawwara-hu aw fahima-hu*) (87.3). The *Uyūn al-masā'il* gives as an example of the object of assent the existence of the heavens (*kawn al-samawāt*) (56.4). In the *Madkhal*, Avicenna indicates the judgemental aspects of assent in his remark that "assent is when there occurs in the mind a relation between this form [which has been conceived] and the things themselves which correspond to it" (*al-taṣdīq huwa an yaḥṣala fī al-dhihn nisbah hadhihi al-ṣūrah ilā al-ashyā' anfas-hā anna-hā muṭābaqah la-hā*) (17.16–17). Cf. Averroes, *Epitome in libros logicae*, 36b: "Et verificatio [= *taṣdīq*] est intellectus rei, per id quod dicitur ipsius dispositio quaedam: et est id, de quo quaeritur ut plurimum dictione, utrum, sicut

is obvious that assent presupposes conception, although conception does presuppose assent:

And the second [way of knowing things] is for conception to be accompanied by assent (*ma'a al-taṣawwuri taṣdīqun*). And this occurs, for example, when it is to you, "Every white is an accident." For from this conception, you acquire only the mere meaning of the statement, but rather you [also] believe (*ṣadde*) that it is so. As for [those cases] when you doubt whether it is so or not, then you have formed a concept (*taṣawwarta*) of what was said—for you cannot doubt you have neither formed a concept of nor understood. However, you have not assented to it yet. For every assent is accompanied by a conception, but not the reverse. And the conception of the likeness of this meaning causes there to be present in your mind the form of this construction, and of those things from which it is composed, such as "the white" and "the accident." And in assent there occurs in the mind a relation of this form to the things themselves to which it corresponds.

One fundamental aspect of the distinction between conception and assent remains to be examined. This aspect is of particular importance for the understanding of the context theory, since it helps to explain why the Arabic philosophers generally preferred to associate the ends of rhetoric and poetics with *taṣdīq* rather than with *taṣawwur*. One of the purposes of including the consideration of the *taṣawwur-taṣdīq* dichotomy in introductory discussion is the purpose of logic is to provide an epistemological foundation for the principal pillars of Aristotelian logic, the definition and the syllogism. In accordance with this aim, the purpose of the definition comes to be identical with the production of an act of conception, whereas the syllogism comes to be assigned the role of causing assent to the truth of a proposition:

But what is useful among the things that are known is either a composition which is directed towards the delimiting [of a meaning] (*al-taqyīd*),<sup>67</sup> and this is in the acquisition of conception through definitions, descriptions, and what takes

est dictum nostrum, utrum vacuum sit: et cum dictione, an, ut est dictum nostrum, an, m sit novus."

<sup>66</sup> Avicenna, *Madkhal*, 17.10–17. Cf. Fārābī, *Kitāb al-alfāz*, 87.17–18.

It does not seem to me that this implicit connection between psychological assent and judgement need represent a confusion of two meanings that collapse into one "imperceptible" as is suggested by Van Ess, *Die Erkenntnislehre*, 99–103. Rather, the Islamic philosophical discussions of the term *taṣdīq* seem consciously to embody the view that any act of judgement in its very nature implies an element of assent. On such a reading, *taṣdīq* is extensionally equivalent to judgement, but intensionally distinct from it; hence it does not represent an alteration in the vocabulary that takes on new meaning owing to its etymological associations, but a new insight into the epistemological implications of the logical notion of judgement.

<sup>67</sup> Literally "tying down," "binding," "confining," "restricting." This is not a technical term, but it conveys nicely the idea of distinguishing what is essential to one concept from what is essential to any other. One is reminded of the aspect of distinctness in the Cartesian standard of "clear and distinct ideas." See *Principia Philosophiae*, vol. 8, pt. 1 of *Oeuvres de Descartes*, Charles Adam and Paul Tannery (Paris: Vrin, 1896): "Claram voco illam, quae menti praesens et aperta est: sicut ea clare a nobis videri dicimus, quae, oculo intuitu praesentia, satis fortiter et aperte illum movent. Distinctam autem illam, quae, cum clara sit, ab aliis ita sejuncta et praecisa, ut nihil plane aliud, quam quod clarum est, in se contineat (emphasis added)."

place; or a composition which is by way of predication (*al-khabar*),<sup>68</sup> and this is concerning the acquisition of assent by means of syllogisms, and what takes their place. And from this mode of composition the genus of statement called apophantic (*jāziman*) arises.<sup>69</sup>

It is clear that the association of syllogistic with the production of assent, as explained in the preceding text, is the principal motivation for the Arabic philosophers' classification of both poetics and rhetoric among the assent-evoking arts, despite the incongruities that this entails for the non-apophantic status assigned to rhetoric and poetics in the *De interpretatione*.<sup>70</sup> Since the Arabic philosophers accept the interpretation of the context theory that considers both rhetoric and poetics to be syllogistic arts, and since the purpose of the syllogism has been linked to the production of assent, the cognitive goals of rhetoric and poetics must also be defined accordingly, in terms of the production of *taṣdīq*.

However, it is also clear that the overall epistemological characterization of assent that has emerged from the texts we have examined does not seem especially well suited to an appreciation of the autonomy of the logical aims of rhetoric and poetics. For a dominant theme to this point seems to be that assent is always accompanied by a judgemental act, as manifested in the acceptance of propositions possessed of determinate truth-values. And as we have observed in the Alexandrian discussions of the context theory, such a focus upon logic's concern with truth-values tends to coincide with the devaluation of the logical aims of all the non-demonstrative arts, particularly rhetoric and poetics. However, there is another side to the epistemology of assent not explicitly emphasized in the Arabic philosophers' official accounts of the *taṣawwur-taṣdīq* couplet, which suggests that the focus of *taṣdīq* is not limited merely to the production of an accurate judgement regarding the truth or falsehood of a proposition.

To a large extent this aspect of assent is reflected in the semantic overtones of the term *taṣdīq* itself. For although the Arabic root of this term, ṢDQ, has the basic meaning of "truth" or "veracity," which would appear to strengthen the connection between assent and truth-values, the term *taṣdīq* itself is the verbal noun of the second derived form, used in its estimative or evaluative sense. Hence it modifies the basic meaning of the root by adding to it the notion of *deeming* something to be true, of *believing in*, and *assenting to*, some proposition. The connotations of the term are thus focused away

<sup>68</sup> Usually the grammatical, not the logical, term for predication. For links between the grammatical terms *inshā'* and *khabar* and the logical couplet of *taṣawwur* and *taṣdīq*, see Van Ess, *Die Erkenntnislehre*, 98.

<sup>69</sup> Avicenna, *Ibārāh*, 31.16–32.2. Other texts which associate conception with the definition and assent with the syllogism are Avicenna, *Najāh*, Q3.8–11, 60.16–18; T7.3–5, 112.11–113.1; *Madkhal*, 18.2–9; *Ishārāt*, 4.5–8, trans. 49; Fārābī, *Kiṭāb al-alfāz*, 87.11–88.1; *Kiṭāb al-burhān*, 45.4–5, 84.19; Averroes, *Epitome in libros logicae*, 36b–37a.

<sup>70</sup> We will see below (chap. 6, 181–85), however, that poetics is considered an assentive art only in an analogous sense.

from the objective truth of the proposition which is known, towards knower's act of evaluating and accepting it as true.<sup>71</sup>

This subtle shift in emphasis from the veracity of the cognitive act to representation of some object to the way in which the cognition itself is accepted by the knower, is reflected in the Arabic philosophers' various efforts to locate the genus to which the act of assent belongs. In Avicenna's *Psychology*, commentary of the *Shifā'*, the genus of assent is identified as "yielding" or "acquiescence" (*idh'ān*). We are also told in this text that the act of assent shares the genus *idh'ān* with the logical end peculiar to poetics, that is, causing acts of the imaginative faculty (*takhyīl*). We will disregard for the moment Avicenna's description in this text of the important concept of *taṣdīq*. As for *taṣdīq*, Avicenna here characterizes it as "an acquiescence to the concept that the thing is as it is said to be." Assentive acquiescence is further specified by Avicenna in causal terms, as an act produced by the propositional content of the utterance, "the condition of that which is spoken about rather than by the attraction of the words themselves, which produces imaginative yielding."<sup>72</sup> Similarly, in the *Qiyās* Avicenna states that the end produced by all the logical arts but poetics may be called "contentment" or "satisfaction" (*al-qanā'ah*). For when the mind assents to a conclusion arrived at by one of these logical methods, it indicates some degree of cognitive satisfaction that the proposition accepted is in fact a true one.<sup>73</sup> This aspect is reflected in the contrast, again between the production of imagination and assent, that Avicenna provides in his short *Poetics* commentary, the *Kitāb al-majmū'* (Compilation). Here producing an imagining is distinguished from assent, in that unlike assent, it does not seek to produce a "conviction" (*i'tiqād*) as to the truth of the statements that have been expressed.<sup>74</sup> In all these passages, an essential relation between the act of assent and the assignment of a truth-value to a proposition is certainly acknowledged. But clearly there is as much emphasis upon the aspect of assent that is reflected in the knower's subjective acceptance of a statement as true as there is upon the fact that assent implies that the proposition corresponds objectively to some real state of affairs.

In the texts of Fārābī as well we can glean some indications of the subtle aspects of assent and notions related to it. In the *Kitāb al-alfāz*, for example, Fārābī determines the number of divisions within the syllogistic art by considering how many distinct types of "compliance of the mind" (*inqiyād dhihn*) can be identified. He then goes on to specify the type of compliance

embodied by each of the five syllogistic arts—demonstration, dialectic, rhetoric, sophistry, and poetics.<sup>75</sup> Fārābī's notion of compliance appears to be broader than the notion of assent, since it includes the imaginative acceptance produced by poetic syllogisms. Its closest parallel in Avicenna's scheme would appear to be the generic notion of *idh'ān* 'acquiescence.' For like Avicennian acquiescence, Fārābī's compliance has the effect of affirming the importance of the subject's acceptance of some proposition over and above the actual truth of what he thereby believes.

Finally, we should note the Islamic philosophers' appropriation of the Mu'tazilite concept of the "acquiescence of the soul" (*sukūn al-nafs*), either as a synonym for *taṣdīq*, or as a synonym for one of its species, namely, rhetorical assent.<sup>76</sup> While Fārābī tends to confine his use of the phrase to the latter application, and performatively so, some have suggested, Avicenna occasionally employs *sukūn al-nafs* to describe the mental acceptance of a belief simply, a use that seems natural in the light of his designation of assent as a form of yielding to a belief (*idh'ān*).<sup>77</sup>

Explications of *taṣdīq* such as these, which recognize the dependence of assent upon the interplay between the knower and the object of knowledge, play an important role in facilitating the incorporation of rhetoric and poetics into the realm of logic. The reason for this is a simple one: assent, insofar as it is a form of compliance, acquiescence, yielding, or satisfaction, partakes not only of a cognitive, apprehending act, but also of an affective, voluntary one.<sup>78</sup> These voluntaristic aspects of assent imply that the central act towards which

<sup>75</sup> *Kitāb al-alfāz*, §§52–53, 96.1–97.13. The notion of compliance of the mind also occurs in the context of a discussion of the history of philosophy in the *Kitāb al-jadal*, 60.4, to describe the state of the masses when they are instructed by a philosopher who uses rhetorical or dialectical methods: "So these beliefs are established in the souls of those listening to him, and their minds comply to them (*wa-inqādat adhānu-hum la-hā*)."

<sup>76</sup> See Van Ess, *Die Erkenntnislehre*, 75–77, for the Mu'tazilite background.

<sup>77</sup> See Van Ess, *Die Erkenntnislehre*, 101; Zimmermann, Introduction to *Al-Fārābī's Commentary and Short Treatise*, cxv–vi. In the *Kitāb al-burhān*, Fārābī explicitly identifies *sukūn al-nafs* as the lowest form of assent (20.8, 18–19, 21.9–12; Vajda, "La théorie de connaissance chez Saadia," 391–92), and the phrase is associated with rhetoric in the *Kitāb al-jadal* as well. At 17.12–13, it is used to describe our acceptance of the testimony of trusted authorities, and at 71.12–72.7, it is used to describe the act of assent proper to the masses (see also Vajda, "La théorie de connaissance chez Saadia," 378, 388–89). Cf. *Iḥṣā' al-'ulūm*, 72.11–12, Palencia, 139. 10–12 (where *dhihn* replaces *nafs*), and Averroes, *Jawāmi' al-khaṭābah*, 169.6–7. Avicenna uses the phrase more generally as a synonym for assent in the psychological chapters of the *Shifā'*, and in the parallel discussions of the *Najāh*. See *Shifā', Nafs*, ed. Fazlur Rahman, *Avicenna's Psychology, Being the Psychological Part of Kitāb al-Shifā'* (London: Oxford University Press, 1959), 222.11; critical edition of the medieval Latin translation by Simone Van Riet, *Avicenna Latinus: Liber de anima, seu sextus de naturalibus*, 2 vols. (Leiden: Brill; Louvain: Peeters, 1968, 1972), 2:104 (in this case the Latin loses the flavour of the reference to *sukūn al-nafs*); *Najāh*, Q182.15, T373.1, trans. Fazlur Rahman, *Avicenna's Psychology* (Oxford: Oxford University Press, 1952; reprint Westport, Conn.: Hyperion, 1981), 55; and in the *Ishārāt*, 57.14, Inati trans., 121.

<sup>78</sup> Cf. the remarks of Madkour, *L'Organon d'Aristote*: "Toutefois, *al taṣdīq* désigne aussi une sorte d'affirmation; c'est un jugement accompagné d'adhésion de la part de celui qui juge. Ainsi, pour Ibn Sinā comme pour Spinoza et Taine plus tard, l'acte de juger implique une certaine conviction" (54).

<sup>71</sup> Cf. Van Ess, *Die Erkenntnislehre*, 101.

<sup>72</sup> *Shifā'*, 162.10–12.

<sup>73</sup> *Qiyās*, 7.16. The term *al-qanā'ah*, used here as a generic term equivalent to *taṣdīq*, most often used to mean "persuasion" or "being convinced," and indicates the act of assent proper to rhetoric. For a fuller discussion of this equivocal use of the term, see chap. 4 below, 105–8.

<sup>74</sup> *Kitāb al-majmū'*, *aw al-hikmah al-'Arūḍiyah fī ma'ānī kitāb al-shifā'* (Compilation of philosophy for 'Arūḍiyah: on the meaning of the *Poetics*), ed. M. Salīm Salīm (Cairo: Dār al-Kutub, 1969), 15.7; 16.1–2.



sylogistic methods are aimed includes more than the mere understanding of the ontological status of some object as it is reflected in a proposition. The distinctions among the syllogistic arts must accordingly be expanded to include not only criteria of truth and falsity, and the modality of the relation between subject and predicate within propositions, but also a recognition of the bearing of the knower's mode of cognition upon the logical aims of each art.<sup>79</sup> Most importantly for our present concerns, however, the voluntarist overtones of assent necessitate an important modification of the suggestion that poetics and rhetoric are distinguished by their appeal to the affective aspects of language, as opposed to its cognitive functions. Insofar as assent implies not only some objective judgement about actual states of affairs, but also a willful adherence to that judgement, the separation of affective and intellectual goals in the use of language and argument will necessarily be decisive.

However, the Arabic philosophers did not always take advantage of the opportunity that the doctrine of *taṣdīq* offers for narrowing the gap between rhetoric, poetics, and the demonstrative method which remains, in their view, the focal point of logic. As we now turn our attention to these philosophers' various schemata for differentiating one form of logical reasoning from another, it becomes clear that the legacy of the Alexandrian versions of context theory still overshadows, from time to time, the more positive tendencies that have emerged from the foregoing analysis of the logical epistemological structures of assent.

### C. MATERIAL AND FORMAL DISTINCTIONS AMONG THE LOGICAL ARTS

#### 1. Logic as Syllogistic

As we have had occasion to emphasize throughout the course of our investigation, the Alexandrian commentators' one-to-one assignment of a specific truth-value or modality to each logical art represented one of the most significant hindrances to the context theory's potential to provide a coherent

<sup>79</sup> On the surface, this perspective may appear to represent a confusion of logical and psychological categories. Such a criticism is implied in Inati's remark that since assent for Avicenna can be true or false, it is problematic whether it should be considered an act of knowledge (Introduction to *Remarks and Admonitions*, 5 n. 21). Such a charge can be mitigated, I think, by recognizing that Avicenna does not claim that assent itself actually determines validity or soundness. Rather, assent is the end towards which all arguments, valid and sound or not, are directed. Hence, while the Islamic philosophers claim that all knowledge must consist of acts of either assent or conception, they do not, so far as I can see, claim that all acts of assent represent true knowledge. And only if this were the case would Inati's question pose a problem for Avicenna and the other philosophers.

One reason for the Arabic philosophers' preoccupation with the division of knowledge into assent and conception seems to be that they view logic as primarily an instrumental science and so tend to relate logical concepts to the epistemological ends that they serve. But this is quite a different matter from determining formal logical criteria themselves on the basis of their psychological causes.

philosophical interpretation of the rhetorical and poetical arts. In the Arabic tradition, some remnants of this scheme are still in evidence, but in general a more sophisticated theory of the nature of logical distinctions replaces the Alexandrian system, and poetics and rhetoric are thereby freed from some of the more negative overtones that had previously been associated with their aims.

The development by the Islamic philosophers of an alternative solution to the problem of how to divide and classify the logical disciplines seems to be closely linked to their resolution of another key issue in the Alexandrian versions of the context theory, that of the degree to which all of the logical arts, including rhetoric and poetics, are syllogistic in their structures. In this regard, there is general agreement among the Islamic philosophers that both rhetoric and poetics are syllogistic in some way, although there remains considerable diversity in the syllogistic interpretation provided for them.

The decision to accord syllogistic status to rhetoric and poetics once they have been accepted into the *Organon* may have been facilitated by Aristotle's own confidence that the syllogistic structures he had discovered and systematized were universally present in all processes of human reasoning. This is the view announced by the Stagirite in the rather notorious passage of *Prior Analytics* 2.23: "We must now state that not only dialectical and demonstrative deductions are formed by means of the aforesaid figures, but also rhetorical deductions and in general any form of persuasion, however it may be presented. For every belief comes either through deduction (*συλλογισμός*) or from induction."<sup>80</sup>

The apparent boldness of Aristotle's claim is easily dismissed by modern logicians as obsolete, given the advent of mathematical logic.<sup>81</sup> Fortunately, in their attempts to apply this bold assertion to rhetorical and poetic discourse, the Islamic philosophers generally appeal to the broad definition of the syllogism provided by Aristotle at 24b18–20: "A deduction (*συλλογισμός*) is a discourse (*λόγος*) in which, certain things being stated, something other than

<sup>80</sup> *Prior Analytics* 2.23.68b9–14 (1:109). On this point, cf. Galston, "Al-Farabi et la logique aristotélécienne," 216 n. 75; Black, "The 'Imaginative Syllogism,'" 242–43. Fārābī echoes Aristotle's confidence regarding the syllogism in the discussion of the *Prior Analytics* in §6 of the *Falsafah Arisṭūṭālīs*, 74.5–17, Mahdi trans., 84: "He made known the mode of using these rules in every rational art that uses reasoning and investigation (whichever art this may be, whether it uses little or much reasoning and investigation); and that every rational art . . . uses some of these rules. Further, he enumerated everything used in any investigation and reasoning in every rational art. He thus explained that all the rules used in reasoning and investigation are included in what he had enumerated in this book of his. And he made it known, further, that every argument in every art that employs instruction and argument (whichever class of argument it may be, whether the argument is intended for instruction, or sophistry and hindering instruction) proceeds by using only these rules or some of them. He placed these rules in a book he called in Greek *Analytica* . . ."

<sup>81</sup> Modern expositors of Aristotle's logic point out the obvious falsehood of Aristotle's claim, since there are many kinds of inference that cannot be cast in syllogistic form, e.g. the very laws that govern syllogistic validity itself. On these points see Patzig, *Aristotle's Theory of The Syllogism*, 132–37; Lynn E. Rose, *Aristotle's Syllogistic* (Springfield, Ill.: Charles Thomas, 1968), 55–56; 89; Jonathan Barnes, *Aristotle* (Oxford: Oxford University Press, 1982), 31.



what is stated follows of necessity from their being so."<sup>82</sup> This definition does not in itself bear directly upon the technical apparatus of the syllogism, but seems rather to define the discursive process underlying any act of formal deduction.<sup>83</sup>

It would, however, be misleading to suggest that all the Islamic philosophers with whom we are concerned are content to leave the issue of the syllogistic status of rhetoric and poetics at the level of asserting that some kind of inferential process underlies rhetorical and poetic discourse. The predominant view, as in the Alexandrian tradition, is that all the logical arts in some way share in the formal properties of the syllogism, and are distinguished from one another only materially, that is, by the kinds of premises that they usually, or most properly, employ. In what follows, we will examine this view primarily as it is developed by Avicenna, since his discussion is the most explicit and systematic. But first, since it has recently been argued that Fārābī implicitly rejects the syllogistic status of rhetoric and poetics in his most sophisticated discussions of the logical character of the two arts, something must be said in defense of our claim that all of the major Islamic philosophers, including Fārābī, subscribe to the view that there are indeed five distinct syllogistic arts.

In her recent consideration of Fārābī's adherence to the context theory, Myriam Galston has claimed that the Fārābīan logical corpus shows evidence of three distinct teachings on the logical character of rhetoric and poetics: (1) that both are syllogistic (represented in Fārābī's Introductory Epistle on logic, *Al-Tawfi'ah*); (2) that both are logical, but not syllogistic (represented in the *Ihṣā' al-ʿulūm*); and (3) that rhetoric, but not poetics, is syllogistic (represented in the *Kitāb al-hurūf*).<sup>84</sup> In our view, however, there is insufficient evidence to support Galston's identification of the second and third positions, although it is true that in some works, most notably the *Kitāb al-shi'r*

<sup>82</sup> New Oxford trans., 1:40. The applicability of syllogistic theory to the *Rhetoric* has clear Aristotelian roots, since the parallels between the enthymeme and the syllogism, and between the example and the induction, are made explicit in various places in Aristotle's works, e.g., *Prior Analytics* 2.27.70a10–11; *Posterior Analytics* 1.1.71a9–11; *Rhetoric* 1.2.1356b2–5. But the attempts of a number of scholars to discover some hint of the poetic syllogism in the Aristotelian corpus, such as those outlined by Schoeler, "Der poetische Syllogismus," 82–84, seem to me to be fundamentally misguided. In the first place, the poetic syllogism must be explained, not as an isolated doctrine, but as part of the attempt to make philosophical sense of the context theory as a whole. Moreover, in neither the Alexandrian nor the Islamic discussions of the context theory is there any indication that the poetic syllogism is meant to play an exegetical role with respect to the *Poetics* itself. In fact, the doctrine of the poetic syllogism plays a very minor role in Arabic *Poetics* commentaries, and receives its fullest development in texts dealing with topics proper to the concerns of the *Prior*, and sometimes the *Posterior*, *Analytics*.

<sup>83</sup> It is interesting that Barnes himself views this passage as a simple description of "deductive inference," but does not see how this might mitigate the apparent audacity of Aristotle's remarks in 2.23 (*Aristotle*, 32).

<sup>84</sup> "Al-Fārābī et la logique aristotélicienne," 203. In effect, though she does not note it, Galston is claiming that Fārābī vacillates between adherence to the three- and five-fold schemes that divided the Greek commentators (see above, pp. 36–44); Galston's third category corresponds roughly to Simplicius's omission of poetics from his enumeration of the syllogistic arts (see above, 17 n. 2, 35 n. 46).

Fārābī does not commit himself to a syllogistic view of poetics, though neither does he explicitly reject such a view.<sup>85</sup>

Galston only mentions the third view in passing, but from the passage she cites from the *Kitāb al-hurūf*, it appears that the reasoning behind her interpretation is that in §§140–142 of this work, poetics is omitted from Fārābī's account of the historical development of demonstration out of the imperfect methods of rhetoric, sophistics, and dialectic. However, that a poetic syllogism played no role in the historical evolution of the syllogism into its most perfect form does not of itself prove that there is for Fārābī no such thing as a poetic syllogism. More importantly, Galston appears to overlook the fact that whatever the implications of the *Kitāb al-hurūf*'s view of the history of logic, Fārābī explicitly includes poetics among the ranks of the syllogistic arts in §129 of the same work.<sup>86</sup>

Galston's strongest claim, however, is that the fivefold division of syllogisms occurs primarily in the Introductory Epistle on logic (*Tawfi'ah*), where Fārābī treats syllogistic theory in a cursory and idiosyncratic manner. The *Ihṣā' al-ʿulūm*, though often believed to concur with the Introductory Epistle, actually intimates that rhetoric and poetics, though logical, are not truly syllogistic.<sup>87</sup>

Before we discuss Galston's interpretation of the *Ihṣā' al-ʿulūm*, we should observe that Galston does not mention a number of other logical texts which also refer explicitly to poetic and rhetorical syllogisms, among them the *Kitāb al-alfāz* and the *Qawānīn al-shi'r*.<sup>88</sup> More importantly, however, the evidence she presents regarding the Introductory Epistle and the *Ihṣā' al-ʿulūm* seems to be inconclusive.

First, Galston argues that the *Tawfi'ah* is only able to include rhetoric and poetics among the syllogistic arts because it employs an unc customary conception of the syllogistic arts, and thereby abrogates the traditional distinction between theoretical and practical science. Galston refers to the use of a distinction in the Introductory Epistle between the practical arts, which may

<sup>85</sup> The *Kuṭāb al-shi'r* is edited by Muhsin Mahdi in *Shi'r* 3 (1959): 90–95; and by Muḥammad Salīm Sālim, as *Jawāmi' al-shi'r*, along with Averroes' *Talkhīṣ kuṭāb al-shi'r* (Cairo: [Al-Majlis al-A'la], 1971).

<sup>86</sup> *Kuṭāb al-hurūf*, 142.13–14: "Of the syllogistic arts, the art of poetics arose among them on account of what there is in human nature of the preference for order and arrangement in all things." For the problem of poetics' place in Fārābī's history of philosophy, see n. 39 above.

<sup>87</sup> "Al-Fārābī et la logique aristotélicienne," 203–6.

<sup>88</sup> *Kuṭāb al-alfāz*, 98 (*maqāyīs al-shi'rīyah*); *Qawānīn al-shi'r*, 268.7–9 (poetic *tamthūl* is identified as a potential syllogism used in poetics), and 268.10, 15 (poetics is listed in Fārābī's division of *qiyās*). Although poetics is not explicitly mentioned in them, two passages from the *Kuṭāb al-jadal* which refer to five syllogistic arts require that a poetic syllogism be assumed. See *Kuṭāb al-jadal*, 13.15–14.1, where the genus of "method" (*tarīq*) is said to comprise all five syllogistic arts; and 58.16–17, where five syllogistic arts are again mentioned. None of this is meant to deny that the syllogistic status of poetics is the most tenuous among the non-demonstrative arts, but simply to show that despite the difficulties, Fārābī apparently felt that it was useful to continue to include poetics among the syllogistic arts, even in cases where poetics itself was not of primary concern.

use syllogisms, though not as their final end, and the syllogistic arts, in which the use of the syllogism itself is the final goal sought by the arts.

Contrary to Galston's claim, however, there is nothing in this notion of syllogistic that "transcends traditional frontiers."<sup>89</sup> Fārābī appeals here to the well-known Aristotelian principle of distinguishing arts according to whether the end aimed at by the art is actually immanent in the art, or transcends the proper performance of its activity. In the practical and productive arts, knowledge, and the syllogisms that produce knowledge, are used by the artist but they function only as his tools, not as his ultimate goal. The logician, in contrast, at least *qua* logician, studies the syllogism for its own sake, and his knowledge of the syllogism is the final cause of his art. The distinction Fārābī is sketching is simply that of the difference between pure and applied logic, known by the later Latin scholastics through the contrast between *logica utens* and *logica docens*, and solidly rooted in Aristotelian soil.<sup>90</sup>

As to the *Iḥṣāʾ al-ʿulūm* itself, Galston similarly focuses upon the nuances of Fārābī's choice of expressions, noting that the text never explicitly applies the adjective "syllogistic" to all five of the non-introductory logical arts, but rather, only claims that the "final activity" of all five is to "employ the syllogism in discourse." Moreover, Fārābī's assertion, at the end of his discussion of these five arts, that "these are the kinds of syllogisms, and syllogistic arts, and types of discourse" used in verification, is read by Galston as a nuanced effort to assert a distinction between syllogisms, syllogistic arts, and types of discourses, the aim of such a distinction being to imply that poetics and rhetoric may be included among syllogistic discourses, and perhaps syllogistic arts, but not among syllogisms.<sup>91</sup> But both these readings seem unnatural, and convincing only if one has already decided that a syllogistic interpretation of rhetoric and poetics is implausible. In the first passage, it seems more plausible to claim that, by this turn of phrase, Fārābī intends no more than to allow for the obvious fact that syllogistic arts include the use of other things besides syllogisms (which is equally the case with dialectic, demonstration, and sophistry), even though the use of the syllogism is in each case the ultimate aim of the art. As to the second passage, it seems that, barring explicit indications to the contrary, the "and" separating the three phrases is more naturally read as explicative rather than as disjunctive. That is, Fārābī is alluding to the underlying principle by which he has discerned that there are five distinct syllogistic arts. For there are five types of syllogisms, five types of discourses composed from such syllogisms, and hence, five syllogistic arts, each one dedicated to the study of one type of syllogism, and one type of discourse.

Galston also draws our attention to an anomaly in the first passage that does seem puzzling in the light of Fārābī's repeated enumeration of rhetoric

and poetics among the syllogistic arts. For when he begins his discussion of the parts of the syllogism, he declares that there are eight parts of logic, defending this claim by noting that there are *three* species of syllogisms and discourses that are used to verify belief, and five arts that use the syllogism, once perfected by these three arts, in discourse. These latter five arts are identified, as one might expect, as the demonstrative, dialectical, sophistical, rhetorical, and poetic arts.<sup>92</sup>

Galston reads the first part of this passage as a denial that poetics and rhetoric have their own syllogisms, even though they are syllogistic arts. Yet Fārābī does not openly state that this is the motivation behind his declaration that there are three species of syllogism. More importantly, however, Galston has not noticed the function of this passage in the discussion of the parts of logic in the *Iḥṣāʾ al-ʿulūm*: namely, that it introduces the traditional consideration of the parts of logic according to the number of books in Aristotle's *Organon*. Thus, what we would expect Fārābī to refer to in the disputed lines, and what he indeed goes on to enumerate in his outline of the *Organon*, is not three types of syllogisms, but the three introductory arts of logic that correspond to the *Categories*, *De interpretatione*, and *Prior Analytics*. It is more likely, then, that the "three" here refers not to three types of syllogisms, but to the three parts of logic that deal generally with discourse and the syllogism, prescinding from their use in one of the five syllogistic arts. Admittedly, Fārābī's way of describing these three parts of logic here is odd, but Galston's reading seems to make less sense out of the overall thrust of the discussion that follows upon this passage, and overlooks Fārābī's generally acknowledged use in this text of the typical format of the Alexandrian prolegomenal literature, of which the discussion of the parts of logic in terms of the Aristotelian corpus is an integral component.<sup>93</sup>

It seems safe to conclude from the foregoing that there is more evidence that Fārābī adhered to the syllogistic interpretation of poetics, or was at worst indifferent to it in some works, than there is evidence that he wished to distance himself from the tradition in this regard. While Galston's study of the Fārābīan version of the context theory is in other respects a perceptive

<sup>92</sup> *Iḥṣāʾ al-ʿulūm*, 79.8-9, Palencia, 137.4-9.

<sup>93</sup> We ought to address as well Galston's claims that the *Kitāb al-shiʿr* and the *Kitāb al-khaṭābah* bolster her view of Fārābī's perspective in the *Iḥṣāʾ al-ʿulūm*. Referring to the discussion of the enthymeme in the latter text, Galston claims that Fārābī's assertion that an enthymeme is often syllogistic only at first glance (*fī bādīʾ al-raʾy*—83.3-4, 85.13-16) is, in effect, a claim that the rhetorical syllogism is not really a syllogism. But all Fārābī is saying here is that the rhetorical syllogism need not be sound, nor even valid, from a technical viewpoint. That is a far different matter from claiming that rhetoric is not syllogistic at all, in the sense Galston is arguing in her article. Moreover, such a claim would apply equally, if not more obviously, to sophistry. See for example *Kitāb al-jadal*, 26.17-27.4, where Fārābī claims, in the context of his discussion of sophistry, that one does not properly apply the term "syllogism" to a formally corrupt argument, though one can use the term of an argument with valid form, but false premises. As to the *Kitāb al-shiʿr*, the fact that Fārābī omits entirely to mention a poetic syllogism, and speaks only of imitation, is simply inconclusive. It does not testify either to a syllogistic, nor an asyllogistic, view of imitation.

<sup>89</sup> "Al-Farabi et la logique aristotélicienne," 203 (my translation).

<sup>90</sup> Cf. our discussion of logic and productive science in chap. 2 above, 26-30.

<sup>91</sup> Galston, "Al-Farabi et la logique aristotélicienne," 205. The two passages occur at *al-ʿulūm*, 79.8-11 and 85.9-10, Palencia, 137.4-9, 140.30-141.2.

one,<sup>94</sup> she seems to have fallen prey to the common and natural assumption that a syllogistic interpretation of rhetoric and poetics is untenable, and that the philosopher of Fārābī's calibre would have found a way to break with the Alexandrian tradition, even if only implicitly, on this matter. Yet we should not forget that the omission of specific details regarding the manner in which poetics and rhetoric are syllogistic is not an indication in itself that an author has repudiated the syllogistic status of these arts, though it may indicate that he does not accord much importance to the issue. In our view, there is ample evidence scattered throughout the Fārābīan corpus that the Second Teacher did uphold the strongest versions of the context theory, and no explicit evidence of any efforts to repudiate it. While Fārābī limits his discussion of poetic syllogistic to points of a more general nature,<sup>95</sup> and is content to focus primarily on the political ramifications of the context theory, he still remains a legitimate entry on the list of Islamic philosophers who subscribe to the teaching of a fivefold syllogistic.

However, as we have already mentioned, it is Avicenna among the major Islamic philosophers who provides the most complete and systematic account of the basic principle according to which five syllogistic arts can be distinguished, namely, that there is formal identity, but material diversity among these five syllogistic arts.

The use of the material-formal principle in the realm of syllogistic occupies a prominent place in the opening discussion of Avicenna's *Qiyās*. In this passage, the formal unity of logic is explained in terms of a diversity of arts participating in a common structure: "And all of these [logical arts] are like participants, either actually or potentially, in the structure and the form of syllogism. And the majority of their differences are in their matters."<sup>96</sup> The same theme is taken up in greater detail, with respect to each individual syllogistic art, in the chapter of the *Qiyās* that treats of the syllogism in general terms, where the language of participation in the "syllogism *qua* syllogism" (*al-qiyās min haythu huwa qiyās*) is again used to express the formal, structural unity of the five syllogistic arts.<sup>97</sup> We will defer our consideration of this more specialized discussion until later, since it is here that Avicenna gives

<sup>94</sup> Especially impressive is her analysis of the relationship between the Aristotelian text and Fārābī's commentaries on them ("Al-Fārābī et la logique aristotélicienne," 192–202), and of the political and humanistic aspects of Fārābī's interpretation of the context theory (210).

<sup>95</sup> Conversely, Fārābī is clearly interested in the formal syllogistic of the enthymeme. See chap. 5 below, 157–71.

<sup>96</sup> *Qiyās*, 4.2–3. Cf. Fārābī, *Kitāb al-jadal*, 13.15–14.1, where method (*al-tarīq*, *al-madhāb* *al-sabīl*) is said to be the ancients' name for the genus that comprises all five of the syllogistic arts.

<sup>97</sup> *Qiyās*, 51.5. Cf. Fārābī, *Kitāb al-alfāz*, §§54–55, 97.2–100.2. For example: "And comprehension of the mind is something which encompasses all [five types of syllogisms], in the manner that the genus encompasses the species, and in the manner that something unrestricted encompasses what is conditioned, and in the manner that the totality encompasses its divisions" (97.3–5).

fullest account of his peculiar interpretation of the poetic syllogism. But it should be noted that in this context Avicenna constantly adverts to the broad Aristotelian definition of the syllogism, and uses it in his defense of the syllogistic character of several logical methods, including poetical, dialectical, sophistical, and hypothetical syllogisms.<sup>98</sup> It is clear that in Avicenna's view, the fulfillment of two essential criteria suffices in order for syllogistic status to be conferred: (1) there must be a definite assertion of the premises, in order to fulfill the condition expressed in Aristotle's phrase "when certain things are posited in it" (*idhā wuḍiʿat fī-hi al-ashyāʾ*)—hence Avicenna's need to defend hypothetical syllogisms; and (2) there must be a recognizable formal connection between these premises, to fulfill the condition that "something else is entailed by the things posited" (*luzima min tilka al-ashyāʾ al-mawḍūʿah . . . shayʾ ākhir ghayra-hā*).<sup>99</sup> Any discourse that manifests both of these properties, whatever its epistemic status, and whatever its intended aim, is, in Avicenna's eyes, a genuine instance of syllogistic argument.

But while Avicenna is adamant that the formal unity of syllogistic is prior to the particular characteristics of any one kind of syllogism,<sup>100</sup> he nonetheless holds, like Fārābī before him, that the study of the demonstrative syllogism is the "principal division" of syllogistic theory, in that its goals are the ones upon which the general utility of logic is founded. Hence even the abstract study of the formal properties of the "unrestricted" syllogism is in some sense undertaken only for the sake of acquiring skill in the use of demonstrative:

And our primary and essential intention in the art of logic is knowledge of syllogisms, and their principal division is demonstrative syllogisms. For the utility of this [art] is for us to acquire through it a tool for the acquisition of the demonstrative sciences. Our secondary intention is knowledge of the other varieties of syllogisms.<sup>101</sup>

The assertion of a strong formal unity among the syllogistic arts is obviously an important factor in ensuring that rhetoric and poetics receive a full partnership in the ranks of logic. Nonetheless, the notion that there are certain properties essential to the syllogism *qua* syllogism, which are participated in by all its species, does not appear to be sufficient of itself to free the context theory from its narrow focus upon demonstrative goals. But when the theme of a shared formal structure is combined with insights into the diversity of as-

<sup>98</sup> *Qiyās*, 55.11–58.15.

<sup>99</sup> *Ibid.*, 54.6–7.

<sup>100</sup> *Ibid.*, 4.4–5: "And the science which investigates universal matters is always prior to the science which investigates particular matters. Thus it is not possible for anyone who is not familiar with the syllogism as unrestricted and general to be familiar with a specific [type of] syllogism."

<sup>101</sup> *Ibid.*, 3.8–11. Cf. Fārābī, *Iḥṣāʾ al-ʿulūm*, 89.7–9, Palencia, 143.10–14: "And the fourth part [of logic—i.e. demonstration] is the strongest, surpassing [the rest] in dignity and authority. And logic only seeks its primary intention in this fourth part, the remainder of its parts being made only for the sake of it"; *Didascalia in rethoricam*, 212.11–12: "... patet quoniam liber Demonstrationis, per se et primo, directivus est in scientiis." See also *Kitāb al-alfāz*, 99.13–16.

sent, the demonstrative standard begins to give way to a greater recognition of the plurality of legitimate syllogistic aims.

## 2. The Basis for Material Distinctions

The formal unity of the syllogistic arts, as expressed in their orientation towards demonstrative goals, led us to the threshold of a familiar epistemological problem common to both the Islamic and the Alexandrian exponents of the context theory. The material diversity among the syllogistic arts is the focus of an even more fundamental problem, that of determining the criteria which epistemological distinctions should be expressed in logical terms. In this context too, there is evident a direct link to Alexandrian doctrines, centering this time on the Alexandrian penchant for assigning determinate truth-values and modalities to the individual logical arts.

Of all the issues that we have discussed thus far, this is the first to give rise to an explicit polemic within the Islamic philosophical tradition, which manifests itself primarily in the logical writings of Avicenna. In both the discussions of the *Qiyās* and of the *Ishārāt*, we find repeated a curt, but emphatic, dismissal of one method for characterizing the differences among the five classes of syllogistic premises:

As for what is said to the effect that premises are either necessary, and these demonstrative [premises]; or most possible, these being those [premises] that are dialectical; or equally possible, these being rhetorical; or least possible, these being sophistical; or impossible, these being poetical—you should not pay any attention to this, nor give any consideration at all to these divisions.<sup>102</sup>

There is an obvious affinity between the scheme which Avicenna here rejects and the modal and truth-value assignments popular among the late Greek commentators. But the Arabic tradition too contains some noteworthy examples of the use of such principles of classification, and Avicenna himself seems to have subscribed to this scheme in his early *Maqālāh fī al-nafs* (Compendium on the soul).<sup>103</sup> Similarly Fārābī, in the *Qawānīn al-shi'r*, provides his reader with a series of divisions of the subject-matter of the logical arts in which truth-value criteria figure prominently. In what follows, we examine Fārābī's discussion in the *Qawānīn al-shi'r* as an exemplar of the doctrine which Avicenna was later to reject, in an effort to attain a better understanding of the inherent difficulties in this approach. A caveat is in order, however, for Fārābī himself does not consistently profess the truth-value modal classification of the logical arts in all his works. While in the extant Fārābī corpus there is not, as in the case of Avicenna, an explicit repudiation

<sup>102</sup> *Qiyās*, 4.7–11; cf. *Ishārāt*, 81.2–5, Inati trans., 149: "Do not pay attention to what has been said, namely that the demonstrative syllogisms are necessary, that the dialectical ones are possible in the majority of cases, that the rhetorical are possible in equal cases, that they are neither inclination nor rarity, and that the poetical ones are false and impossible. This is the [proper] consideration; nor did the father of logic [i.e. Aristotle] indicate it."

<sup>103</sup> Landauer, "Die Psychologie des Ibn Sīnā," 361.14–19; see above, chap. 2 n. 60.

of the doctrine, it is possible that Fārābī's silence elsewhere indicates that he too may have come to see the limitations in the doctrine, and was led to reject it, or to supplement it with other considerations.<sup>104</sup>

It is the third of the *Qawānīn al-shi'r*'s three divisions of the subject-matter of logic to which criticisms such as Avicenna's are most clearly applicable. In this division, Fārābī takes as the generic class to be divided statements or syllogisms—the two are interchangeable insofar as the character and truth-value of the statements contained in any syllogism determine the character and truth-value of the syllogism itself, and its conclusion:

Syllogisms, and statements in general, can be divided in another way. For statements are said to be absolutely true in all respects, or absolutely false in all respects, or true for the most part and false for the least, or the opposite of this, or equally true and false. And that which is absolutely true in all respects is the demonstrative, what is true for the most part is the dialectical, what is equally true [and false] is the rhetorical, what is true for the least part is the sophistical, and what is absolutely false in all respects is the poetical.<sup>105</sup>

This system for distinguishing the syllogistic arts differs slightly from that upon which Avicenna heaps his disparagement, in that simple truth-value assignments, qualified by the frequency of their applicability, are replaced in Avicenna's texts by the modal concepts of necessity, possibility, and impossibility. As we saw in the previous chapter, both truth-value and modal formulations for material logical distinctions occur interchangeably in the Alexandrian commentaries.<sup>106</sup> Indeed, the equivalence of the two sets of formulations seems quite obvious: necessary statements are absolutely true in all respects, impossible statements are absolutely false in all respects, and possible

<sup>104</sup> While heeding this important caveat, it is equally necessary that we do not simply assume that Fārābī's development is exactly mirrored by Avicenna's, and that the *Qawānīn al-shi'r* thus represents an early position that was later abandoned. Schoeler, "Der poetische Syllogismus," seems by times to make this assumption. He admits that the truth-value scheme which was popular among the Alexandrians is occasionally represented in Fārābī's works, but suggests that Fārābī gives up the view in the *Iḥṣā' al-'ulūm* and the *Kitāb al-shi'r* ("Der poetische Syllogismus," 53–55). However, this is somewhat misleading, since it implies that there is definite evidence in these texts that Fārābī has repudiated the views of the *Qawānīn al-shi'r*. This is not, however, the case, as Schoeler himself later seems to admit (74). In the absence of a reliable chronology of Fārābī's works (even a "relative one," *pace* Heinrichs, "Arabische Dichtung," 129), it seems best to refrain from any speculation about Fārābī's ultimate position, and simply to focus on the philosophical issues that confront the viewpoints presented in various Fārābīan texts.

<sup>105</sup> *Qawānīn al-shi'r*, 268.10–15 (my translation); cf. *Risālah fī mā yanbaghū an yuqaddama qabla ta'allum al-falsafah*, 52.8–15. The truth-value division of premises also occurs in the *Kitāb al-khaṭābah*, 87.12–15, although here Fārābī does not assign a determinate truth-value to the premises of the individual logical arts.

<sup>106</sup> The truth-value scheme is found, for example, in Philoponus, Elias, and the Anonymous Heiberg author; the modal scheme in the Brandis scholiast on the *Prior Analytics*; and the collation between modal and truth-value assignments in Ammonius's *Prior Analytics* commentary. See chap. 2 above, 36–43. In the Islamic tradition, Fārābī generally uses the language of truth and falsehood in the texts we have cited, whereas Avicenna prefers the modal terms of necessity and impossibility in the repudiated *Maqālāh fī al-naḥs*.



statements are those in which there are varying admixtures of truth and falsehood.

In fact, it is somewhat misleading to consider either the Alexandrian or the Fārābī schemes to be based on simple truth-value assignments, since any scheme that goes beyond designating propositions as "true" or "false" is already modal in some way, qualifying as it does the way in which their truth values adhere to the propositions thus described. Whether we interpret the assignment of truth-values temporally, so that "absolutely true in all respects" means "true at all times" or whether we construe it on a generic class basis, so that it means that the predicate is essentially true of all members included under the subject, the modal nature of the scheme is unmistakable.<sup>107</sup>

In our examination of the Greek versions of the context theory, we suggested some of the problems that this sort of material classification might pose. In general terms, to identify the propositions proper to any branch of logic simply on the basis of the frequency of their being true or false does not seem to provide us with a proper or essential definition for any of the logical arts. Certainly such a classification gives us no distinguishing mark to set when we are attempting to identify the character of a particular statement in composition, except perhaps in the case of poetics and demonstration, where truth and falsity are stated in absolute terms. Even if the modal classification did provide accurate descriptions of the propositions included in each logical art, such a characterization would only offer us a necessary, and not a sufficient, condition for classifying any given proposition in a particular way. For the truth-value and the modality of a statement are not the sorts of properties that distinguish a rhetorical statement from a demonstrative one, or a philosophical statement from a dialectical one.<sup>108</sup> The case of poetics provides

<sup>107</sup> Further support for our claim that Fārābī's truth-value scheme is essentially modal can be gathered from contemporary discussions of modal logic. For example, according to the standard of modality in terms of possible worlds, necessary statements are true in all possible worlds, possible statements in at least some, and so on. Cf. Jaakko Hintikka, *Models for Modalities* (Dordrecht: Reidel, 1969), 72. And more generally, see the introduction to the notion of modality in G. E. Hughes and M. J. Cresswell, *An Introduction to Modal Logic* (London: Methuen, 1968), 22: "Among true propositions, we can distinguish between those which merely happen to be true and those which are bound to be true (or which could not be false) . . . A proposition which is bound to be true we call a *necessarily true* proposition, and the expressions 'bound to be true,' 'true in all possible worlds,' and their counterparts with the other modal operators, clearly express the same logical concepts as Fārābī's phrase 'absolutely true in all respects' and its counterparts."

For a summary of the various ways of construing modal notions in the Arabic philosophical tradition, see D. M. Dunlop, "Averroes (Ibn Rushd) on the Modality of Propositions," *Islamic Studies: Journal of the Central Institute of Islamic Research, Karachi* 1 (1962): 23-34; and Nicholas Rescher, "Averroes' Quaesitum on Assertoric (Absolute) Propositions," *Journal of the History of Philosophy* 1 (1963): 80-93, reprint in *Studies in the History of Arabic Logic*, 91-105.

<sup>108</sup> To put the point I am making here in other words, if we were to take Fārābī's truth-value division as offering definitions of the various logical arts, then for any discourse composed of propositions  $P_1, P_2, P_3 \dots P_n$ , we would simply determine the truth or falsity of each statement individually, compute the proportion of true statements to false ones, and then assign the discourse to its proper art. But this is clearly not the way we decide whether this or that work

an excellent example of this general problem with the modal classification. Even if we grant the dubious claim that all poetic statements are "entirely false" or "impossible," we would not be inclined to say every poetic statement is poetic simply in virtue of its falsehood or its impossibility. At most we would claim poetic status for these statements on the basis of other qualities, such as their imaginative or mimetic character, while acknowledging that by virtue of their possessing this property, poetic statements are always impossible as well. And by the same token, few people would claim that any impossible statement becomes poetic simply by virtue of its impossibility: for example, the impossible, absolutely false statement, "All triangles are four-sided," is hardly poetic by any standards.<sup>109</sup>

The difficulties of applying Fārābī's principles to the realm of poetics illustrates well the more general incongruities of the third classificatory scheme of the *Qawānīn al-shi'r*. But the position of poetics within this scheme also poses some peculiar problems of its own. As was also the case with the Alexandrian discussions of poetic premises, the meaning of poetic falsehood in this division is not entirely clear. If Fārābī intends to suggest that poetic statements are always false, his claim is open to serious objection. For there are surely some instances, no matter how few, where poetic statements also happen to be true, as in those rare cases when a metaphor is true even on the literal level.<sup>110</sup> Perhaps, then, Fārābī is thinking of the fictional nature of poetic statements, as Ebbesen has suggested of the Anonymous Heiberg author.<sup>111</sup> But this interpretation runs into difficulties, since poems may refer to real entities and real events as much as to fictional ones. Aristotle himself makes provision for this in the *Poetics*, and it seems requisite for the interpretation of those genres of Arabic poetry that praise or deride real individuals.<sup>112</sup> The notion of the necessary falsehood and impossibility of poetics is consistently rejected by Avicenna and Averroes in their commentaries on the *Poetics*. Part of the reason for this is that the fictional character of the subjects of poetics is eclipsed in the text of the *Poetics* by the theme of the representation and the incitement of human actions and emotions. Since the poet's

poetry, philosophy, or rhetoric. The same point would hold if we applied the truth-value criteria to an individual proposition, and interpreted the modal notions in terms of the frequency of times at which the proposition is likely to be true rather than false.

<sup>109</sup> The same criticism does not hold, however, for demonstrative statements, which can legitimately be defined in terms of their absolutely necessary and universal character. But this anomaly simply points out the fundamental source of confusion in the truth-value/modal division of the branches of logic—namely, that it represents another vestige of the attempt to measure the other logical arts by standards that are proper to demonstration alone.

<sup>110</sup> The phenomenon of the literal truth of certain metaphors assumes an important place in some contemporary philosophy of language. The parallel with the medieval problematic is discussed in more detail below, 213-14; 242-46.

<sup>111</sup> *Commentaries and Commentators*, 1:102.

<sup>112</sup> See *Poetics* 9.1451b15-33. One might claim that even if the subject of the poem represents a real person, the poetic representation itself refers to a fictional entity comprising only the sum total of those qualities exploited by the poet. For a discussion of this as an interpretation of the *Poetics* itself, see Robert J. Yanal, "Aristotle's Definition of Poetry," *Nous* 16 (1982): 499-525.



aim is to exhort the hearer to imaginative acceptance, and ultimately to pursuit or avoidance of some act or object, the matters represented in the poem must have some recognizable application to him as a human agent. Averroes declares: "Indeed, the poet speaks only about existing or possible matters, because these are the things he seeks to have people flee or pursue or which he seeks a congruous comparison . . ." <sup>113</sup> Such an emphasis upon the possible and the existent in the realm of poetics poses an obvious and concrete challenge to the truth-value and modal classification of logical premises in one of its more vulnerable aspects. If the identification of poetic premises as absolutely false is untenable, then the entire scheme represented in *Qawānīn al-shi'r* and similar texts appears to fall with it. But the Arabic tradition does have a more acceptable alternative for classifying premises, one that harmonizes with the conception of poetry embodied in the Arabic readings of the *Poetics*, and at the same time provides a more profound understanding of the nature of the other logical arts, including demonstration. Surprisingly, it is the willingness to exploit the full potential of the epistemology of assent, especially on the part of Avicenna, that opens the possibility of a revised interpretation of the material aspects of syllogistic theory.

We have raised a number of interpretive difficulties that appear to be entailed by the scheme of premise classification represented in Fārābī's *Qawānīn al-shi'r* and similar texts, in particular as it relates to poetic statements. But Avicenna himself raises serious theoretical objections to the general application of modal distinctions within this scheme. His primary interest, however, is in the consequences of the scheme for demonstration, not for rhetoric or poetics. For in both the *Qiyās* and the *Ishārāt*, Avicenna shows concern about the fact that this kind of scheme denies the possibility that there can be demonstrative certitude of matters that are themselves merely possible. In fact our mode of understanding what is *per se* merely possible may itself be necessary. That is, we may be certain that a proposition asserting that some matter is possible is itself necessarily true. Hence, in the *Qiyās*, Avicenna observes: "For we know that necessary things enter into demonstration; but the possible may also enter into demonstration." And in the *Ishārāt* he explains further: "If these [demonstrative] premises are necessary, the conclusion drawn from them is necessary, in the manner of their necessity, and [if] they are possible, the conclusion drawn from them is possible."<sup>114</sup>

By positing a one-to-one correspondence between a determinate variety of syllogistic and a specific modality, there is no way left for the logical system to accommodate formally the fact that our mode of understanding an

<sup>113</sup> Averroes, *Talkhīṣ al-shi'r*, 77.1–3, Butterworth trans., 83. For other passages emphasizing the possible and existential character of poetic discourse, see *Talkhīṣ al-shi'r*, §§38–39, 76.1–79.8, Butterworth trans., 83–86; §55, 86.14–18, Butterworth trans., 93; §104, 129.2–5, Butterworth trans., 138. In Avicenna, see *Shi'r*, 179.15–18, Dahiyat trans., 94; 183.8–23, Dahiyat trans., 99–100; 184.2–15, Dahiyat trans., 100; 196.16, 197.4–5, Dahiyat trans., 119.

<sup>114</sup> *Qiyās*, 4.12; *Ishārāt*, 80.9–11, Inati trans., 148. Cf. *Ishārāt*, 60.5–7, Inati trans., 150.

ject is not always identical to the object's mode of being. This is the fundamental problem which Avicenna's critique is intended to remedy. There is a close affinity between this critique, and the distinction between modality *de dicto* and *de re*, that is, between "It is possible/necessary that S is P" and "S is possibly/necessarily P." For what is at issue in both cases is the need to distinguish between modality as it pertains to existence of the objects of our knowledge, and modality as it characterizes our knowledge itself, as expressed in propositions about those objects. But there is a difference between the two. For the *de re/de dicto* distinction is a purely formal one, which properly refers to two different ways of interpreting propositions containing an explicit modal operator. Avicenna's distinction, on the other hand, is meta-logical. It attempts to differentiate between two different perspectives from which non-modal propositions can be classified in modal terms: one related to the ontological modality of things (and parallel to *de re*) and the other related to the epistemological modality of the knower's understanding (and parallel to *de dicto*).<sup>115</sup>

The need to distinguish between the necessity or possibility of our knowledge, and the necessity or possibility of the objects we know, constitutes one of the more important functions of modal logic. If we assign a specific modal differentia to each of the syllogistic arts, the very concept of modal operators becomes redundant. In Avicenna's view, this consequence follows from the fact that modal operators provide a means for expressing refinements within demonstrative knowledge itself. When a philosopher explicitly designates propositions as possible or necessary, he indicates an interest in the ontological status of the object known, an interest proper to a theoretical inquiry aimed at an essential grasp of what is known. To declare explicitly that "S is necessarily P," or that "X is possibly Y," usually implies that the propositions themselves are necessary truths, arrived at as the result of painstaking metaphysical investigations. Such operators are seldom invoked unless the user is certain that the knowledge they express is itself necessary. In Avicenna's words: "What was intended [by Aristotle] is that the truth of the premises of the demonstration is, in their necessity, possibility, or absoluteness, a necessary truth."<sup>116</sup>

But such modal refinements are superfluous, and even detrimental, to the achievement of the ends pursued by the other logical arts. The orator, for example, is interested in the concrete facts necessary for proving his case, and the subtleties of modal logic will only confuse the matter. Even if he tends by

<sup>115</sup> That Avicenna's critique is not about the use of explicit modal operators is clear. If it were, the critique would commit a rather blatant straw man fallacy. For it is highly unlikely that anyone would maintain, for example, that poetic statements are always of the form, "It is impossible that S is P"; the claim at issue is instead that all poetic statements of the form "S is P" are impossible.

On the *de dicto/de re* distinction, see William Kneale, "Modality *De Dicto* and *De Re*," in *Logic, Methodology, and Philosophy of Science*, ed. E. Nagel, P. Suppes, A. Tarski (Stanford: Stanford University Press, 1963), 622–633.

<sup>116</sup> *Ishārāt*, 82.3–4, Inati trans., 150.

and large to use premises whose modality is merely possible, he does not explicitly designate them as such, but instead assumes them as existential actual. Thus he does not suggest that it is merely possible that someone acts in a given way is just and good; he asserts this possible premise as evidence that the person is in fact of such a character.<sup>117</sup> Because the oral purpose is not primarily to reveal the nature of things, but to persuade hearers, he does not, and should not, introduce modal considerations into discourse.

For Avicenna, then, the only suitable place for introducing modal notions is within the realm of demonstration. But it is difficult to see how a division of syllogistic such as that of Fārābī's *Qawānīn al-shi'r* would ever be able to make use of modal refinements, even within demonstration. If the statement "S is P" is merely possible (or equally true and false), for example, specifying its modality will only make it explicit that it is, by definition, rhetorical. There will be no possibility of making the proposition a suitable object of demonstration by introducing the modal operator. And yet, as Avicenna points out, there may be times in which the philosopher needs to express the fact that he knows, without a doubt, at least the fact of that possibility.

It would be extremely misleading, in focusing upon this point of agreement between (the later) Avicenna and Fārābī, if we were to overlook that the text from the *Qawānīn al-shi'r* accurately reflects Fārābī's overall outlook. Fārābī's position is extremely complex, and several of his remarks in other contexts display a very nuanced and sophisticated understanding of modality which seems to conflict with the doctrines expressed in the *Qawānīn al-shi'r*. With regard to the modal nuances upon which the Avicennian technique is based, Fārābī himself expresses a similar understanding of the character of necessity and possibility in his *Kitāb al-khaṭābah*. While Fārābī declares in this work that "of the possible there is no certitude at all," he immediately qualifies his meaning by restricting this declaration to the realm of future possibility:

I do not mean that our knowing of the possible, that it is possible, is not certain; rather, I mean that when something has the possibility of existing in the future, it does not exist, it is not possible for us to have any certitude concerning it, whether it will exist or not exist, and so our belief in the existence of what is possible is not all certain.<sup>118</sup>

In the above text, Fārābī himself shows a keen appreciation of the need to distinguish between modes of being and modes of knowing. Similar perceptions are in evidence in writings dedicated to the explication of the theory of demonstration, such as the *Kitāb al-burhān* and the *Sharā'it al-yaqīn*. Bo

<sup>117</sup> *Qiyās*, 177.2–12. Cf. Averroes, *Jawāmi' al-khaṭābah*: "You ought to be apprised that the division—i.e. the division into the necessary and the possible—is not essential to the premises of enthymemes inasmuch as they are the premises of enthymemes. . . . For it is with regard to demonstrative syllogisms that premises are taken according to this description" (180.12–13, trans. 69).

<sup>118</sup> *Kūāb al-khaṭābah*, 33.14–34.2.

these texts contain detailed discussions of certitude, and include a consideration of the distinction between necessary and non-necessary certitude, a distinction that reflects similar concerns to those expressed in the above passage from the *Kitāb al-khaṭābah*. Thus, Fārābī tells us that necessary certitude is distinguished from non-necessary certitude on the basis of the ontological mode of the object's existence: "Necessary certitude is to believe of that which, in its existence, cannot be otherwise than it is, that it cannot be otherwise than what is believed of it, in any way, or at any time. And the non-necessary is what is certain only at one time."<sup>119</sup> The *Sharā'it al-yaqīn* elaborates further on this distinction, noting that the criterion of ontological necessity has the effect of excluding sensible and existential propositions from the realm of absolute certitude, reserving it for intelligibles, and hence for universal and necessary propositions.<sup>120</sup> In a similar vein, the distinction between absolute and accidental certitude in the latter text serves again to illustrate Fārābī's sensitivity to the distinction between the ontological status of the objects of knowledge, and the knower's mode of grasping them. Hence, the sixth condition of certitude he lists is that our certitude be "essential" and not accidental. This will prevent certitude from being predicated in any absolute sense of those beliefs which happen in fact to be necessarily true, but to which the subject assents for some reason other than his knowledge of the matter itself, such as his own emotional states and biases.<sup>121</sup>

Admittedly, these Fārābīan reflections on modality and demonstrative certitude do not strictly accord with the position of Avicenna's *Ishārāt*, since Fārābī is still closing off the realm of absolute demonstrative certitude to all possible matters. And Fārābī continues to refer to the traditional truth-value assignments for non-demonstrative premises to explain certain of their epistemic features, as he does with dialectic throughout the *Kitāb al-jadal*, where the partial falsehood of dialectical premises is traced to their concern with possible matters.<sup>122</sup> This creates the impression that Fārābī saw the use of the traditional criteria of truth-value and modal assignments to be complemented, rather than contradicted, by the use of more flexible epistemic criteria based on distinct types of assent, which are equally prominent in the same texts. But despite these misgivings, the foregoing survey of texts does show Fārābī responding to the same sorts of concerns that appear to have motivated Avicenna's sharp critiques of the traditional Alexandrian divisions of the logical arts. If Fārābī does not concur entirely with the position to be advocated by his successor, he at least shows himself to be capable of a sophisticated approach to the same issues.

<sup>119</sup> *Kitāb al-burhān*, 21.15–17. The discussion continues to 22.16.

<sup>120</sup> *Sharā'it al-yaqīn*, §5, 100.7–17; §7, 102.3–7; §10, 104.6–12. The discussion of the *Posterior Analytics* in the *Falsafah Aristūṭālīs*, makes the same point, stating that neither possible nor existential premises are capable of yielding demonstrative certitude (75.1–5, 18–22, trans. 84–85).

<sup>121</sup> *Sharā'it al-yaqīn*, §6, 100.18–101.12.

<sup>122</sup> *Kitāb al-jadal*, 20.22–22.10 (see Vajda, "La théorie de connaissance chez Saadia," 382–85); 107.9–13.

It is beyond the scope of our present topic to speculate over why and how Fārābī was able to hold the seemingly opposed views represented in texts such as the *Kitāb al-khaṭābah* and the *Kitāb al-jadal* on the one hand, and the *Qawānīn al-shiʿr* and *Risālah fī mā yanbaghī . . . taʿallum al-falasafah* on the other, without ever explicitly repudiating either approach. There is not enough of the Fārābīan corpus available to allow us to give any definite answers. Perhaps Fārābī did not feel that these positions were in fact incompatible. Although ultimately Avicenna's scheme allows demonstration a much wider range in the overall scope of human knowledge, by extending it into the realm of the possible, the truth-value/modal division of logic gives much more vivid and unqualified support to the primacy of demonstration, granting it a virtual monopoly on truth. Moreover, the scheme of the *Qawānīn al-shiʿr* has some attractiveness for the purposes of the context theory because it appears to effect a strong unity among the logical arts, by recognizing a single goal, namely, that of distinguishing truth from falsehood, the aim of all the logical arts. Or perhaps the reasons are not philosophical but textual and historical: perhaps Fārābī, like Avicenna, undergoes some sort of evolution in his thought away from the influence of the Alexandrian school; or perhaps in some works he intends only to transmit the received Greek teachings, whereas in others he is philosophizing in his own voice. Whatever the actual explanation, we must be careful not to impute too much to the Second Teacher any simplistic acceptance of the truth-value differentiation of the syllogistic arts, and reserve our appraisal of his position until we have examined in more depth his detailed treatments of the poetical and rhetorical arts.

### 3. Tasdīq and the Classification of Premises

We have suggested already that the key to replacing the truth-value and modal system of premise classification with a system that is at once more flexible and more sophisticated lies in the ability of the Islamic tradition to exploit the principle that assent is ultimately the epistemological goal that logic seeks to effect. The full and systematic implementation of such a reform is clearly represented in the writings of Avicenna, perhaps because the logic of assent seems especially important to Avicenna's epistemological outlook.

<sup>123</sup> This is quite possible in the *Qawānīn al-shiʿr*, since Fārābī declares the exposition of Greek accounts of poetics to be a major objective, and devotes a good deal of the treatise cataloguing the types of Greek genres that are mentioned by Aristotle, Themistius, and others. But his enthusiastic discussion of the position of poetics and sophistic within the classification of the parts of logic seems to indicate an inclination to accept these views as his own, and there are no disclaimers in the text to the contrary.

<sup>124</sup> Until recently, it has seemed that the *taṣawwur-tasdiq* couplet was only inchoately present in many Fārābīan texts (especially if the *ʿUyūn al-masāʾil* is to be rejected as authentic Fārābīan.) See for example Van Ess, *Die Erkenntnislehre*, 102; in a recent article, I too now think what seemed to be a less developed presence of the couplet in Fārābī ("The 'Imaginative Syllogism' in Arabic Philosophy," 254 n. 28, 256). But the appearance of the complete edition of Fārābī's short commentaries on logic by Al-ʿAjam and Fakhry (*Al-Manṭiq ʿinda al-Fārābī*), shows

This is not to say, however, that the principles of Avicenna's system of premise classification are totally foreign to Fārābī. Throughout the logical writings of the Second Teacher, we find both general statements of a less complex system of premise-classification that is a clear precursor to the systems of Avicenna, and specific discussions of the epistemic status of particular types of propositions that will also be included in the Avicennian schemata.

General discussions of the types or varieties of propositions that are used in the different syllogistic arts occur in at least three of Fārābī's short commentaries on logic, the *Kitāb al-qiyās al-saghīr* (Short book on the syllogism), the *Kitāb al-jadal*, and the *Kitāb al-burhān*.<sup>125</sup> In the *Kitāb al-qiyās al-saghīr*, Fārābī lists four varieties of propositions which are able to act as premises in syllogisms, because the assent given to them does not itself derive from the syllogistic process: received premises (*maqbulah*); widely-accepted premises (*mashhūrah*); propositions arising from sensation (*ḥāsilah ʿan al-ḥiss*); and propositions that are intelligible by nature (*al-maʿqūlah bi-al-ṭabʿ*).<sup>126</sup> In this passage, there is no effort to collate each premise type with a logical art, perhaps because the text, which is based on the *Prior Analytics*, deals with what is common to all the syllogistic arts. In the *Kitāb al-burhān* and *Kitāb al-jadal*, however, an effort is made to assign specific premise types to specific syllogistic arts. Here, certain premises (*al-yaqīnīyah*), taking the place of premises intelligible by nature, are assigned to demonstration; widely-accepted premises are assigned to dialectic; and received premises are assigned to rhetoric.<sup>127</sup> The *Kitāb al-jadal* lists the same four premises as does

that discussions of conception and assent pervade much of Fārābī's logical teaching. Perhaps, then, it is not the inchoateness of the doctrine of assent in Fārābī, but Avicenna's overt development of a theory of proposition-types in terms of assent, that separates him from his predecessor.

<sup>125</sup> For a general description of Fārābī's series of short commentaries on the *Organon*, see Mario Grignaschi, "Les traductions latines des ouvrages de la logique arabe et l'abregé d'Al-farabi," *AHDLM* 39 (1972): 41–107, and Galston, "Alfarabi et la logique aristotélicienne," 193, 210 n.2.

<sup>126</sup> *Kitāb al-qiyās al-saghīr*, ed. Rafiq al-ʿAjam, vol. 2 of *Al-manṭiq ʿinda al-Fārābī*, 75.2–6; the text is also edited by M. Türker, "Fārābī'nin Bazi Mantik Eserleri," *Revue de la Faculté de Langues, d'Histoire, et de Géographie de L'Université d'Ankara* 16 (1958): 249.20–50.3; there is an English translation from the Türker edition by Nicholas Rescher, *Al-Fārābī's Short Commentary on Aristotle's 'Prior Analytics'*, 57. The text as edited by Al-ʿAjam omits the class of intelligibles premises, but they are mentioned in the apparatus, and included in Türker's edition. One presumes they were meant to be on the list, for Fārābī suggests his list is exhaustive, and to omit intelligible premises would be tantamount to excluding demonstrations from the class of syllogisms. Moreover, Fārābī's other consideration of general properties of the syllogism, the *Kitāb al-qiyās* (Syllogism), lists the same set of four premise-types, including *maʿqūlah kullīyah uwal* 'primary, universal intelligibles.' For this text, see vol. 2 of Al-ʿAjam, *Al-manṭiq ʿinda al-Fārābī*, 18.16–19.6.

<sup>127</sup> *Kuāb al-burhān*, 20.18–21.25; see also Vajda, "La théorie de connaissance chez Saadia," 390. In this text, each premise type is also assigned a distinct form of assent to which it gives rise: certitude in the case of demonstrative premises, near certitude (*al-tasdiq al-maqārib li-al-yaqīn*) to widely-accepted premises, and *sukūn al-nafs* (acquiescence of the soul) to rhetorical or received premises. On *sukūn al-nafs*, see above, 77.

the *Kitāb al-qiyaṣ al-saghīr*, mentioning sensible premises, but using the *yaqīnīyah* for the demonstrative class.<sup>128</sup>

Fārābī's classification of premise types in the foregoing texts does not give the impression of a systematic or exhaustive scheme, though Fārābī sometimes implies his lists are exhaustive. The collation of premise-types with five species of syllogistic is incomplete, since there is no mention at all of other sophistry or poetics.<sup>129</sup> Despite the general agreement of the various Fārābīan texts with one another, the fourfold division of premises has something of an *ad hoc* appearance about it: it does not yet seem to have been raised to the level of a fundamental structure in Fārābī's conception of logic.<sup>130</sup>

The matter is somewhat different with Avicenna. While reproducing several of Fārābī's premise-categories in his own writings, Avicenna goes far beyond Fārābī, adding new categories, extending the classification to include multiple types of premises for all five types of syllogisms, and most importantly, articulating the rationale behind the scheme by linking it explicitly to the notion of assent. In doing so, Avicenna is able to accommodate to some degree the logician's legitimate preoccupation with the truth-value modality of propositions, since it is a necessary condition of *taṣdīq* that there occur with it some judgement of truth and falsehood to which assent is given. But Avicenna's focus upon the act of assent as an epistemological phenomenon also enables him to take into account the knowing subject's notion of granting assent to this judgement, the key element lacking in the modal truth-value system which prevented it from recognizing, among other things, demonstrations of the possible. Moreover, Avicenna's assent-based scheme is flexible enough to encompass even the ends of poetics, without forcing poetic art into a paradigm into which it was not meant to fit. For Avicenna at least, that assent itself need not always be the goal of the syllogistic process,

<sup>128</sup> *Kitāb al-jadal*, 19.6–12. Fārābī does not assign sensible premises to any particular logical art, although he discusses them extensively throughout the text. Since Fārābī is adamant that dialectic, sophistry, and demonstration all reason only about universal matters, presumably sensible propositions, as such, belong to none of these, unless they are in some way raised to a universal level. Since Fārābī clearly accepts that demonstrative knowledge can arise from experience (see, e.g., *Kitāb al-jadal*, 66.18–19; *Kitāb al-burhān*, 24.17–25.9), perhaps sensible premises can belong to a variety of logical arts, depending on the way in which they are accepted, and depending upon whether they are taken as universal or as particular.

<sup>129</sup> Fārābī sometimes links sophistry to widely-accepted premises, distinguishing it from dialectic on the grounds that dialectic takes premises that are in fact widely-accepted, while sophistry takes those that only appear or are presumed to be so. See for example *Kitāb al-jadal*, 26.10–16, and chap. 5 below, 144–45 n.19. Fārābī does discuss poetic syllogisms in terms of their being productive of imagination (*mukhayyilāh*), and this is also included as one category within Avicenna's system of premise classification. But Fārābī does not bring poetic syllogisms directly into play in any of his discussions of premise-types of which I am aware.

<sup>130</sup> An alternative classification of premises, clearly relying upon Aristotle's *Posterior Analytics*, occurs in Fārābī's *Kitāb al-burhān*, 87.14–90.16. This division includes certain premisses, definitions, axioms, and postulates. Especially significant here is the use of the term "premises whose acceptance is necessary" (*al-muqaddimāt al-wājib qubūl-hā*) (87.17) to describe certain premisses, since this Avicenna's term for the class of premisses that are suitable for demonstration.

that not all syllogistic premises need to evoke our assent. The minimal requirement for all premises is simply that they elicit some element of acceptance in the human soul which is capable of engendering a discursive, syllogistic movement from premises to a conclusion:

All of the principles of the syllogism are matters which are assented to in some respect, or not assented to. But if that which is not assented to does not follow the course of what is assented to, because of an impression of it in the soul which in some respect takes the place of what causes assent to occur, then it is not used at all in syllogisms.<sup>131</sup>

In three of his works, the *Burhān*, the *Najāh*, and the *Ishārāt*, Avicenna develops the principle expressed in this passage into a very elaborate and detailed classification of premise-types.<sup>132</sup> Two of these discussions, that of the *Burhān* and the *Najāh*, occur in the introductory sections of treatises dedicated to demonstration, suggesting that Avicenna's main purpose is to determine which premises are suitable for demonstrative use. While it is not our intention to discuss in detail the individual classifications that Avicenna provides in these three extended discussions of premise-types, a brief overview of some of the categories included may help to illustrate the features of the system which are important for our concerns.<sup>133</sup>

Although these three accounts differ somewhat in the number and variety of the premises listed in each, generally they present a single and consistent theory. But since the *Ishārāt* is the only one of the three discussions that explicitly assigns premise-types to the individual syllogistic arts, it will be most convenient to present a rough schematization of its doctrine. Not all of the subdivisions which Avicenna makes within each category are included here, but our list is sufficiently complete to give an indication of the underlying rationale of Avicenna's system.<sup>134</sup>

#### 1. Demonstration:

Propositions which must be accepted (*al-wājib qubūl-hā*).

Subdivisions include:

Primary propositions/First principles (*al-awwalīyāt*)

<sup>131</sup> *Burhān*, 63.3–5.

<sup>132</sup> *Ibid.*, 63.1–67.20; *Najāh*, Q61.1–66.7, T113.7–123.1; *Ishārāt*, 55.15–64.5, Inati trans., 118–28. Cf. also Avicenna's *Treatise on Logic: Part One of Danesh-Name Alai (A Concise Philosophical Encyclopedia) and Biography*, trans. Farhang Zabeeh (The Hague: Nijhoff, 1971), 40–42. Avicenna also alludes to the classification of logical premises in his psychological writings, though scholars have tended to overlook the connection that Avicenna wishes to forge between logic and psychology. See, for example, *Najāh*, Q182.4–183.11, T371.12–374.14, Rahman trans., 54–56, *Nafs*, 221.14–223.10, Van Riet, 102.94–105.39, where, in the course of a discussion of the aid provided by the animal faculties to the rational soul, Avicenna alludes to the discussions of empirical premises and of premises derived from *tawātur* (transmitted accounts) in the logical corpus.

<sup>133</sup> A detailed outline of the three variations on this classification scheme in Avicenna is provided in Shams Inati's Introduction to *Remarks and Admonitions*, 28–34. Schoeler, "Der poetische Syllogismus," also provides a summary of the *Ishārāt* scheme and of al-Ṭūsī's commentary on it (53–56). Cf. Van Ess, *Die Erkenntnislehre*, 398–406.

<sup>134</sup> Based on *Ishārāt*, 55.16–64.5, 80.7–81.8; Inati trans., 118–28, 148–49.



Sensibly-perceived propositions (*al-maḥsūsāt*)

Empirical propositions (*al-mujarrabāt*)

Intuited propositions (*al-ḥadsīyāt*)

Propositions based on unanimous reports or traditions (*al-tawātur*)

2. *Dialectic*:

Widely-Accepted Propositions (*al-mashhūrāt*)

Subdivisions include:

Primary propositions (*al-awwalīyāt*) not insofar as they require acceptance, but insofar as they are universally acknowledged as true (*ʿumūm al-ʾitirāf*)

Esteemed or Praiseworthy Propositions (*al-maḥmūdāt*)

Determined Propositions (*al-taqrīrīyāt*).<sup>135</sup>

3. *Rhetoric*:

Received Propositions (*al-maqbūlāt*), based on authority

Supposed or Presumed Propositions (*al-maẓnūnāt*)

4. *Poetics*:

Premises Productive of Imagining (*al-mukhayyilāt*)

5. *Sophistic*:

Propositions Resembling the other Propositions (*al-mushabbahāt*), used to deceive the hearer.

An initial glance at Avicenna's classification both here and in his other works can be somewhat misleading, in that there is no clear principle of classification immediately apparent in the scheme. Some of Avicenna's categories are clearly faculty-oriented, such as the sensibly-perceived premises (*al-maḥsūsāt*), the premises productive of imagining (*al-mukhayyilāt*), and the premises apprehended by the estimative sense (*al-wahmīyāt*).<sup>136</sup> This use of psychological categories seems vaguely reminiscent of the discussions of Philoponus and his successors, in which syllogistic premises were classified according to their originating psychic faculties.<sup>137</sup> But clearly psychological doctrines do not play a prominent role in the general pattern of Avicenna's classification.<sup>138</sup> Still, if we reflect a moment on the function that the appeal to a psychological faculty serves in these particular instances, it becomes clear

<sup>135</sup> The name refers to propositions determined by the context of a dialectical debate, once accepted as postulates within a science.

<sup>136</sup> We have not included this very interesting and important category on our list, since its assignment to a specific logical art is not undertaken by Avicenna. Ghazālī lists "pure estimative premises" (*al-wahmīyāt al-ṣīfah*, i.e. those not held in check by the intellect) as sophistical. See *Maṭīyār al-ʿilm* (The standard for knowledge), ed. S. Dunya under the title *Manṭiq taḥṣīl al-falāsifah* (The logic of the *Incoherence of the philosophers*) (Cairo: Dār al-Maʿārif bi-Miṣr, 1961), 198.23–199.18.

<sup>137</sup> See chap. 2, 37–38, 40, 44–45. Sensible premises, of course, are one of Fārābī's four categories, as we have seen; the estimative are not mentioned at all by Fārābī, since it appears that this psychological category is original to Avicenna.

<sup>138</sup> They are useful, however, for drawing distinctions within broader categories that designate a generic type of assent. Thus, in the *Burhān*, 63.16–64.2, the category of premises to which assent is necessary is divided into those where the necessity is evident to the senses, and those where the necessity is hidden, to the extent that its apprehension involves some psychic power other than the five external senses. Hidden necessity is then discussed by Avicenna in terms of the specific psychological source faculty that necessitates assent, and whether it is an intellectual power, or a non-intellectual one, such as estimation.

that its role is primarily to specify the kind of acceptance which these propositions impose upon the knower. For example, the important aspect of sensible premises is not their origin in the sense powers *per se*, but rather, the fact that we are naturally compelled to assent with strong conviction to what we perceive directly; in imaginative premises, the important element is the affective movement that images naturally engender when accepted; and in estimative premises, what is emphasized is the inability of the estimative sense to assent to the existence of anything that is not sensibly-perceptible.<sup>139</sup>

The same emphasis, moreover, clearly underlies Avicenna's non-psychological categories. Several subdivisions of dialectical and demonstrative premises, for example, are grouped together under two broader categories in the *Ishārāt*, most generally as admitted propositions (*al-musallamāt*), and more specifically as beliefs (*al-muʿtaqadāt*). And demonstrative premises are designated in Avicenna's scheme primarily in terms of the fact that their acceptance by the knower is necessary.<sup>140</sup> While objective certitude is clearly of underlying importance, the emphasis here is upon the fact that assent to demonstrative premises is incumbent upon the human mind. Avicenna does not, for example, defend the demonstrative status of empirical premises by arguing for the uniformity of nature; all that he emphasizes is the subjective necessity that forces us to believe in what we have repeatedly experienced: "The experientials are propositions and judgments that are consequent upon our repeated observations, which leave a trace by their repetition, thus insuring the formation of a strong and an indubitable belief."<sup>141</sup> The same is true in the case of *al-tawātur*, premises based on numerous and unanimous accounts, which lead us to assent to the existence of those empirical truths that we have not witnessed ourselves. Avicenna's concern here is not to provide a justification of testimonial and historical evidence, but to point out that numerous, unanimous witnesses suffice to remove any doubt that might cause the withholding of assent.<sup>142</sup>

Similarly, in the case of non-demonstrative premises, Avicenna's focus remains that of determining not only the source of assent, but also its extent and its degree. In the case of dialectic, for example, the emphasis is upon the social and situational factors that engender assent, whether it be the general notoriety and popularity of a given belief, or the provisional acceptance of a

<sup>139</sup> Compare too the description of intuited propositions (*al-ḥadsīyāt*): "These are propositions in which the principle of the judgement is a very strong intuition of the soul, with which doubt is removed and to which the mind submits (*wa-adhana la-hu al-nafs*)" (*Ishārāt*, 57.8–9, Inati trans., 121).

<sup>140</sup> Cf. Fārābī's foreshadowing of this principle, n. 130 above.

<sup>141</sup> *Ishārāt*, 56.17–57.1, Inati trans., 120. Avicenna does not deny, in Humean fashion, that one can demonstrate the reliability of experience as a source of certitude. But he adds at the end of this passage that this proof is not the responsibility of the logician (57.2–3). Cf. Fārābī, *Kiṭāb al-burhān*, 23.3–12, cited in n. 146 below.

<sup>142</sup> *Ishārāt*, 57.13–17, Inati trans., 121. Avicenna's examples of *tawātur* are our belief in the existence of Meccah, Galen, and Euclid. For a discussion of the notion of *tawātur*, see Bernard Weiss, "Knowledge of the Past: The Theory of *Tawātur* According to Ghazālī," *Studia Islamica* 61 (1985): 81–105.



proposition imposed by disputation or investigation. The case of rhetorical premises is similar, except that the cause of assent is more remote from the knower, and evocative of a lesser degree of adherence.<sup>143</sup>

It is also here, in the realm of rhetorical and dialectical premises, that we find a precursor for Avicenna's perspective in the writings of Fārābī. While Fārābī does not raise to the level of a general principle the shift of emphasis from objective truth to mode of assent, he does recognize such a shift within individual arts. In a number of passages in the *Kitāb al-jadal*, Fārābī distinguishes renown (*shuhrah*) from truth, and claims that it is the former, not the latter, that is relevant in determining dialectical acceptance. Renown and esteem (*maḥmūdah*) or repudiation (*shamīʿ*), rather than truth or falsehood, are repeatedly asserted to be the categories proper to dialectical assent:

Of widely-accepted beliefs there are those which are chosen and esteemed by all, and those which are repudiated and rejected by all, the latter being repulsive to all. And these two contradict one another in terms of what is widely-accepted. As the true and the false do in scientific propositions. For the true in what is scientific corresponds to the chosen and esteemed in the dialectical. And the false in what is scientific corresponds to what is repulsive in the dialectical.<sup>144</sup>

Later in the same text, Fārābī pushes to the limit his claim that only demonstration is dependent upon objective criteria for its acceptance. In discussing the granting of dialectical premises by the participants in a dialectical debate, Fārābī remarks that demonstrative premises require no such process of granting. Their truth-status is natural to them, not relative to their being accepted by a particular knower; indeed, there need be no acknowledgement of them at all for them to be premises, since "they are only premises because of the conditions that belong to them in themselves, and not because of their relation to someone positing or acknowledging them."<sup>145</sup>

In chapters five and six, we will discuss in greater detail the specific characterizations of those premises that are eventually assigned to the province of the rhetorical and poetical arts. But this general synopsis of Avicenna's division of the material aspects of the syllogism, and its precursors in Fārābī, is

<sup>143</sup> See for example the description of the act of assent underlying presumed premises (*mazmūnīyāt*): "By 'presumption' here I mean an inclination of the soul with a feeling that the opposite is possible" (*Ishārāt*, 61.15–16, Inati trans., 125; cf. *Najāh*, Q64.6–7, T120.9 *Burhān*, 66.16).

<sup>144</sup> *Kitāb al-jadal*, 20.1–4, Vajda, "La théorie de connaissance chez Saadia," 380–81; cf. *Kitāb al-jadal*, 105.12–18, where the impossible and the repugnant are said to be analogous in the spheres of science and dialectic. Perhaps this principle is inspired by the Aristotelian analogy between pursuit and avoidance in the realm of sensation, and affirmation and denial in the realm of intellection. See *De anima*, 3.7.431a8–14, 431b10–12. The latter passage clearly asserts a generic unity between true and false, and good and bad: "That too which involves no accident, i.e. that which is true or false, is in the same province with what is good or bad: yet they differ in this, that the one is absolute and the other relative to someone" (1:686). On the role of the Aristotelian background in the Islamic philosophers' discussions of poetics, see chap. 7 below, 231–35.

<sup>145</sup> *Kitāb al-jadal*, 65.8–9.

revealed much in its own right. Despite its *prima facie* appearance as a haphazard collection of unrelated epistemological distinctions, Avicenna's divisions of premises, and to a lesser extent those of Fārābī, are united by an underlying effort to understand and explain the differing types and degrees of adherence evoked by the various logical arts. The system *assumes* that objective certitude generally underlies those forms of assent that are naturally incumbent upon a human knower, but leaves it to another discipline, such as metaphysics or natural philosophy, to justify this belief. What is important for the logician is the recognition that demonstrative acceptance and the certitude that it engenders are as much a form of subjective adherence as are the acts of assent produced by the rest of the arts. The question of how we know whether or not the accepted assertion is true or necessary is thus utterly distinct from, and irrelevant to, determining to which branch of logic a given syllogism belongs.<sup>146</sup>

To this extent, then, the focus of Islamic logic upon the goal of assent, culminating in the recognition by Avicenna of a new sense of the material aspects of the syllogism, is the key to the ability of Arabic logic to exploit fully the potential of the context theory for promoting an autonomous interest in rhetorical and poetical modes of discourse. Admittedly, as we have seen in this chapter, the tendency to regard demonstration as the primary goal of logic remains intact despite this development. Even in accepting the version of premise classification systematized by Avicenna, the Arabic tradition was not entirely immune to the temptations of a truth-value scheme, a scheme that admittedly offers a unified view of logic as the method for distinguishing the true from the false. The allure of this temptation is later evidenced in the logical discussions of Ghazālī, who combines the premise classification of the later Avicenna with a colourful, but derisive, adoption of the sort of truth-value assignments found in Fārābī's *Qawānīn al-shiʿr* and in Avicenna's early *Maqālah fī al-naḥs*.<sup>147</sup>

<sup>146</sup> On this point, cf. Fārābī, *Kitāb al-Burhān*, 23.3–12, on the certitude of primary premises: "And there is no need for us to make known in this book how they are attained and from where they are attained, because our being ignorant of the manner of their attainment does not cause [our] certitude in them to cease, nor does it diminish it, nor impede us from composing a syllogism from them which causes certitude for us as a necessary entailment from them. And the manner in which these primary knowables are attained is one of the things investigated in the sciences and in philosophy." See also the passage of Avicenna, cited in n. 141, above.

<sup>147</sup> Ghazālī adopts Avicenna's assent-oriented premise classification, and yet works it into a truth-value schema like that found in Fārābī's *Qawānīn al-shiʿr*, illustrating it with a picturesque analogy to counterfeit coins. See the *Maqāsid al-falāsifah* (Intentions of the philosophers), ed. S. Dunya under the title *Muqaddimah al-tahāfut al-falāsifah* (Introduction to the *Incoherence of the philosophers*) (Cairo: Dār al-Maʿārif bi-Miṣr, 1961), 100.5–101.24; critical edition of the medieval Latin translation by Charles Lohr, "Logica Algazelis: Introduction and Critical Text," *Traditio* 21 (1974): 223–90, esp. 273.495–278.675; see also Miṣṣār *al-ʿIlm*, 184.4–186.19.

#### 4. *Concluding Remarks*

In themselves, the general logical doctrines that we have examined in this chapter, within which the Islamic philosophers' expositions of the context theory unfold, remain somewhat ambivalent. On the one hand, the philosophers we have examined remain tied to the hierarchical ordination of all intellectual and philosophical endeavors to the attainment of demonstrative certainty, and for this reason tend to deny any strictly autonomous worth to the goals of the non-demonstrative arts. This occurs, as we have seen, even in the recognition of the importance of rhetoric and poetics for fulfilling the communicative functions of language. For the overriding orientation of these two arts to the aims of communication is ultimately perceived, not as evidence of an aspect of the rational use of language which *requires* the appeal to demonstrative means, but as evidence of the philosopher's ability to dispense with these skills for his own personal, and truly philosophical, goals.

Nonetheless, it cannot be emphasized too strongly the extent to which the concept of assent, in its specific development into the underlying principle of a new system for the epistemic classification of premises, provides a countervailing force against this dominant trend. For the assignment to each art of particular kinds of premises, which produce particular varieties of assent, provides an important measure of autonomy to the individual logical art, ensuring that each of them will fulfill an epistemological function that is clearly independent of the functions of every other art. It is mainly within the more detailed and individualized treatments of rhetoric and poetics that the fruits of this development are reaped in the Arabic context. Such developments, to which we will give our attention in the remaining chapters, show evidence of a serious and sophisticated interest in the semantics of poetic and rhetorical language and their underlying argumentative structures. It is an interest which, in many ways, would seem to belie the harsher pronouncements we have encountered regarding the philosopher's indifference as philosopher, to the arts of rhetoric and poetics.